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OUR FINANCIAL SYSTEM

An Introductory Text

BY

ALBERT S. KEISTER

Professor of Economics, North Carolina College for Women; Formerly Assistant Professor of Finance, the University of Chicago

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PREFACE

THIS book has been written with three purposes in view; perhaps it would be more exact to say, for three classes of people. First, for those who are seeking a better understanding of finance as a part of their general education. Money affairs play an exceedingly important rôle in modern life. Prices and profits (financial concepts) control and motivate our economic life, while the pursuit of riches seems to have become a national ideal. The very beginning of wisdom regarding the present economic and social order would seem to be an understanding of financial factors and forces. Finance should, *prima facie*, be included in a liberal education.

Second, for those who have entered, or are planning to enter, business. Finance is one of the most important functions, some would hold *the* most important, of a business enterprise. An understanding of the principles of capital raising, of the proper use of shares of stock, of notes, and of other instruments, as well as a familiarity with the work of our financial institutions are, or should be, basic elements in business education. Persons preparing to enter business would be well advised to apply themselves to the mastery of such fundamentals as business finance, even though this means spending less time on some of the routine drills of the typical "commercial course."

Third, for those who are struggling with the management of their own personal finances. The author does not claim to have, within the covers of this book, the solution for, or even

to have shed light upon, all of the perplexing problems of personal finance. There may, however, be some helpful ideas for those who wonder what they should do with their savings. Or for those who wonder what the bank or the insurance company does with their savings. For the first time in history the masses of the people are saving money. In America the number easily runs into the tens of millions. It is futile to try to educate this army of savers in the wise selection of particular bonds or shares of stock. If they want to put their money into securities they must, and should, take the advice of specialists along this line. But whether they should put their money into securities or into some other type of investment is a question to be settled first. And this question must be settled by the individual himself. In order to settle this question wisely it is necessary for the individual to know the advantages and disadvantages of each form of investment; to know specifically what the savings bank, the building and loan association, the mortgage company, and the others have to offer. Knowing the institutions, he is in a position to choose among them. He can formulate a program of investment. I have tried to describe these investment institutions in such a way that one who knows nothing of investing money can make a reasonably intelligent selection of the one or ones that best meet his needs.

The plan of the book is simple. Starting with an explanation of money and of the monetary system we are using in the United States, the work of money in modern business enterprises is next discussed. Then the uses of financial instruments, such as stocks, notes, and drafts, are shown, followed by a description of the work of each of the major financial institutions in society. In conclusion a brief critical analysis of the system is offered. Throughout, the method has been the functional one, to show the *workings* of our financial sys-

tem and to relate these workings to that broader field — our economic system. In formal courses of study it may be used: (*a*) as the main text to be supplemented by other material; (*b*) as supplementary material to a main text; or (*c*) as an introductory book, offering a rapid survey of the field, for courses in Money and Banking or General Finance.

I have long felt that the two cardinal sins in textbook writing, as in teaching, are dullness and lack of clearness. If a writer, or teacher, cannot make his material interesting and his points clear he has missed his calling. Accordingly, I have striven for these two ends — to make the discussion clear and to make it interesting. Concrete illustrations have been freely employed. I have assumed the risk of being charged with writing childishly in places, because I believe that in most cases a story or incident can teach a point better than a didactic statement. The questions at the end of the chapters are framed on the same theory. For further study, references are given to only a few books in the field, on the assumption that schools and colleges are more likely to have and to use a few books than many.

During the six years in which this book has been in process of being written, taught, criticized, and rewritten, I have changed its form so many times and imbibed ideas from so many sources that all acknowledgments rightfully due cannot now be made. High school and college teachers have aided, especially Mr. Joseph Chada, Mr. E. E. Menefee, Mr. L. M. Speaker, Miss Ann Brewington, and my former colleagues, Professors H. G. Moulton, C. O. Hardy, S. P. Meech, and L. W. Mints. Officers of various financial institutions have given assistance generously, especially Dr. W. C. Clark, Vice President of S. W. Straus & Company, and Mr. Ralph Spaulding of the Continental Illinois Bank and Trust Company. Above all others, two men have been most helpful,

Professors L. C. Marshall and L. S. Lyon. They have nurtured the enterprise from its inception, lending aid in matters ranging all the way from mere grammatical form to the very plan of the book itself. It would be no great exaggeration to say that whatever merit the work has is due to them.

ALBERT S. KEISTER

DECEMBER 1, 1929.

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PART I

THE MONETARY SYSTEM OF THE UNITED STATES

PURPOSES OF PART I

1. To explain why we have money and why there are various kinds of money in use to-day
2. To show the relationship between gold money and other kinds of money
3. To indicate the importance of money in modern society

CHAPTER HEADINGS OF PART I

CHAPTER I. Why We Have Money
CHAPTER II. Gold Money as Standard Money
CHAPTER III. Subsidiary Money: Silver Dollars and Fractional Coins
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"Harry," said Stuart to his partner, "I see that the *Leviathan* came into New York the other day with $2,000,000 worth of gold bars in her hold."

"Yes, we have in this country now nearly half of all the gold in the world," replied Harry. "I wonder whether it is a good thing for us to get so much gold."

"I doubt it," said Stuart. "We don't need it to back up our paper money, for it was safe enough before all this new gold came in. Furthermore, if Europe loses all this gold, how is she going to be prosperous and buy American goods?"

Why is gold such an important thing that the newspapers report its movement?

Why do we say that a five-dollar bill is as good as gold? There are more paper-money bills in circulation than there is gold in the country. How can every bill be as good as gold?

A German professor and his wife living in Berlin had been saving for eighteen years, so that by 1912 they had accumulated 8,000 gold marks, equal to about $2,000 in American money. They loaned the 8,000 marks to a gardener who was building a home at the edge of the city. The loan was made for ten years. In 1922 the gardener repaid the loan with 8,000 paper marks, equivalent to the wages for one day's labor.

How could a money system become so deranged that one day's wages would offset the savings of eighteen years?

Has the United States ever had an experience with paper money similar to that of Germany? If so, what happened?

OUR FINANCIAL SYSTEM

CHAPTER I

WHY WE HAVE MONEY

A. Difficulties Encountered When There Is No Money
B. How Money Simplifies the Work of Exchange
C. The Precious Metals Used as Money
D. Why We Have Coinage

A. Difficulties Encountered When There Is No Money

(The disadvantages of barter)

"Some years since, Mademoiselle Zélie, a singer of the Theatre Lyrique at Paris, made a professional tour round the world and gave a concert in the Society Islands. In exchange for an air from Norma and a few other songs, she was to receive a third part of the receipts. When counted, her share was found to consist of three pigs, twenty-three turkeys, forty-four chickens, five thousand cocoanuts, besides considerable quantities of bananas, lemons, and oranges. As Mademoiselle could not consume any considerable portion of the receipts herself, it became necessary in the meantime to feed the pigs and poultry with the fruit." [1]

[1] From Jevons, *Money and the Mechanism of Exchange*, Chapter 1. D. Appleton and Company, New York.

This incident illustrates some of the difficulties found when there is no money. How could the managers of the concert fix an admission price? How was the man at the door to decide how many members of a family to admit for one turkey? How many cocoanuts were to be considered equal to one chicken in buying admissions? The difficulties the singer had in taking the receipts with her, and in exchanging them in other places for lodging and other necessities, can be imagined.

But we need not go to the South Sea Islands for an example. In the American colonies coins were scarce. The students at Harvard College for many years met their bills by the payment of produce, livestock, meat, and "occasionally with various articles raked up from the family closets." One student, later president of the college, in 1649 settled his bill with "an old cow." The accounts of the construction of the first college building include the entry, "Received a goat, 30 shillings plantation of Watertown rate, which died." [1]

When the Harvard students paid their bills with produce and live stock, how were the college authorities to value these things? And how could these things be used to procure the service of instructors or fuel and light for the buildings? Obviously barter, a trading of one thing directly for another, would be resorted to. Thus the college authorities might agree to give room, board, and instruction for a certain time for a cow. Having received the cow, the college might then trade the cow to one of the instructors for so many weeks of instruction.

Barter has serious disadvantages. — When barter is used as a method of exchanging goods several serious disadvantages appear:

[1] Dewey, *Financial History of the United States*, p. 19. Longmans, Green & Co., New York.

1. It is difficult to find a person who has what you want and who wants what you have. The Harvard instructor starting out with his cow to trade it for sufficient cloth to make a suit might search in vain for a person who had a surplus of cloth and who also wanted a cow.

2. Having found a person who has what you want and wants what you have, the next difficulty is to accomplish a fair exchange. Our Harvard instructor might well believe that his cow should bring five yards of cloth, even though four yards would be more than sufficient for his new suit. He could not offer four fifths of his cow for the four yards of cloth he needed. He would have to give the entire cow and get all the cloth he could, even though he would prefer some buttons and thread to the one extra yard of cloth. If he should be successful in obtaining five yards of cloth for the cow, then he must look farther for some one who would exchange buttons and thread for his excess cloth. Thus the fact that many commodities are not readily divisible puts serious difficulties in the way of barter.

3. Since every commodity may be traded directly for every other commodity, it becomes next to impossible to compute or remember what a commodity is worth. Not only may one cow equal five yards of cloth and one yard of cloth equal so many buttons, but cows and cloth and buttons have exchange possibilities with all other commodities from accordions and apples down the list to zinc and zithers. If there were but ten commodities exchanging for one another, there would be forty-five ratios to remember; while if there were one hundred commodities in the market there would be no less than 4,950 exchange ratios instead, simply, of prices in dollars and cents. How pleasant it would be to clerk in a store under such conditions! What opportunities for differences of opinion!

B. How Money Simplifies the Work of Exchange

(Money measures value and serves as a medium of exchange)

Money serves as a measure of value. — Suppose that when Mademoiselle Zélie gave her concert in the South Sea Islands cocoanuts had been regarded as money. In that event, a pig would have been worth so many cocoanuts; a chicken would have been worth so many cocoanuts; a turkey, a dozen bananas; and everything else in the Islands would have had their worth expressed and measured in cocoanuts. The managers of the concert could then have set the price of admission, say, at five cocoanuts for an adult and two for a child. Thus, a money, whether metallic coins or cocoanuts, or something else, permits a *price* to be placed on things. Now this is the first and most fundamental service of money, namely, to express the worth of other things — to *measure value*.

Money serves as a medium of exchange. — A second service of money is illustrated by the foregoing case. If cocoanuts had been the sole thing taken at the door and if the patrons had sold their other articles in the market place for cocoanuts and had bought their admission with cocoanuts, then cocoanuts would have been the *medium of exchange*. With some one commodity thus available as a medium of exchange, the task of buying and selling would have been much simpler. For example, with one hundred commodities, there would be one hundred prices rather than 4,950 ratios of exchange.

Nor in this matter do we need to go to the South Sea Islands for an example. In the colony of Massachusetts, the inconvenience of barter led to the use of money. Since metallic coins were scarce, the colonists resorted to the use of ordinary commodities which were acceptable to every one. Certain staple commodities such as corn and beaver skins were at various times used as money, and these were declared

by law to be acceptable in payment of debts. Then Harvard College could fix the tuition in terms of this "commodity money," and the students would know in what to make payment. Instructors would be entirely willing to accept their salary in beaver skins, for example, knowing they could take the skins to the store and buy what they needed. The disadvantages of barter were thus overcome by the use of some one commodity which was used as a measure of value and a medium of exchange.

C. The Precious Metals Used as Money

(The triumph of gold and silver over other commodities used as money)

Many different commodities have been used as money. — We are so accustomed to the use of metallic money that we are in danger of assuming that gold and silver are the only commodities that can be used as money. But, as suggested by the account of early colonial money in Massachusetts, this is by no means a fact.

Among primitive peoples, in the hunting stage, furs and skins were widely used as currency. These things were durable as well as useful for clothing. Since they were universally acceptable, they were fitted to serve as money. The North American Indians used furs as their medium of exchange more extensively perhaps than they used any other one thing. Leather money has had wide circulation throughout considerable portions of the earth.

When the people rise to the pastoral state, sheep and cattle are likely to be used as money. *Pecunia*, the Latin word for money, comes from *pecus*, meaning cattle.

In the agricultural stage of man's development, many and varied have been the articles used as money, including corn, tobacco, rice, cocoanuts, almonds, sugar, and even eggs and dried codfish.

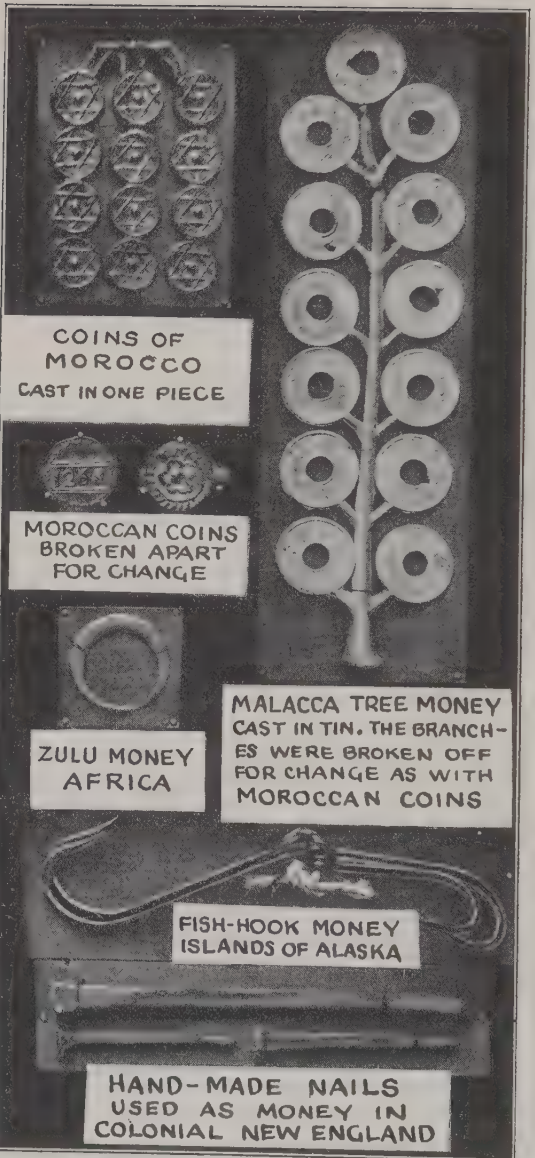


Photo from Farran Zerbe

PRIMITIVE FORMS OF MONEY

The precious metals have been used as money for centuries. — The deep-seated desire for personal adornment, found in all peoples in all times, is responsible for articles suitable for ornaments being used as money. Such articles would be highly esteemed, durable, transferable, and usually fairly stable in their value or power to purchase other things. No doubt the fact that mankind has always given high rank to gold and silver as ornaments has had much to do with the fact that they have been widely used as money. Whether these metals became money because of their ornamental properties or for some other reason, we know that from earliest times, gold and silver have been used for expressing the worth of other things, as well as for buying and selling things; that is, they have been used as a measure of value and as a medium of exchange. Early literatures, especially those of the Hebrews and Greeks, leave no doubt on that point.

Qualities of an ideal money. — We have already pointed out some of the qualities which were possessed by things used as money, such qualities as durability, transferability, and general acceptability because of usefulness as ornaments or as material for clothing or food. We have now gone far enough to note that there are seven qualities which a commodity should possess to make an ideal money. An ideal material for money has never yet been discovered, for man has never found a commodity which scores perfectly on these seven tests. However, silver and gold score higher on these tests than any other commodities ever tried. The seven qualities needed for a perfect money are:

1. *Value.* — The commodity should be sought after and desired for its own worth. For this to be true, it must be limited in supply and must satisfy a human want. Obviously gold and silver meet this requirement. As far back as we can trace history, these metals have been "precious";

they have been desired for ornaments; they have been eagerly searched for by man; and when found they have been highly prized. They have not been as useful as iron for making weapons, tools, and implements, but their scarcity coupled with their popularity for ornamental purposes has certainly qualified these two metals to pass the first test.

2. *Cognizability.* — To make an ideal money, a commodity should be easily recognized. We should be able to "tell it at a glance." The more cognizable the commodity is, the more difficult it is to counterfeit it. Tested by this quality, gold scores very high and silver rather low. It is quite difficult to counterfeit gold because of its peculiar yellow color, combined with its great weight. But silver, when coined, much resembles some of the baser metals, notably lead.

3. *Divisibility.* — The candidate for recognition as money should be a commodity capable of being divided into parts without destroying the commodity, and without lessening its proportional value. On this test many early moneys, such as cattle, fail to qualify. Metals are obviously divisible. After they have been divided into parts, occasions sometimes arise for recombining the parts into larger units. The metals are combinable as well as divisible.

4. *Durability.* — If a person is to exchange his products for a commodity money, and is to hold such money until he needs to buy something with it, he should be able to find that his money, at the end of any length of time, has neither deteriorated nor shrunk. The metals, generally speaking, outrank other goods in this test, and among the metals gold and silver outrank many of the others.

5. *Homogeneity.* — Every unit of the commodity should be capable of being made exactly like every other unit. If this is not the case, a person has to scrutinize carefully the unit offered him to determine how good it is. Then the users

will be confronted with all shades of value from the poorest unit to the best unit of the commodity. Corn, tobacco, salt, wampum, and many other historical moneys are certainly defective in this respect. They are heterogeneous instead of homogeneous; that is, there are many grades instead of one. On the other hand, all of the eighty-five or ninety substances known as chemical "elements" possess perfect homogeneity, since when pure they cannot be broken up into simpler substances, and hence every unit is exactly like every other unit. Gold and silver are both chemical elements.

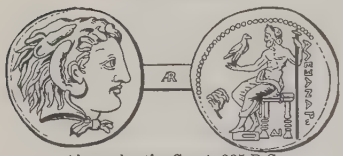
6. *Portability.* — One should be able to carry the money about with him, for trade frequently involves the transfer of money from place to place. The commodity should not be so bulky that a great mass of it makes only a small amount of value, nor should it be so "precious" that even a little of it is easily lost. Gold is conveniently portable for the payment of moderately large sums, but not convenient to be carried about for the payment of small sums. On the other hand, silver is portable for small transactions, but unwieldy for large sums. The two supplement each other fairly well.

7. *Stability of Value.* — The demand for, and the supply of, the commodity should be so even and regular that the value remains stable. In that case one finds if he "saves his money," he has at the end of the period the same amount of value he had at the beginning. An unstable money discourages saving and makes plans for the future hazardous; a stable money promotes thrift and certainty. Gold and silver are not perfect in stability; neither is any other commodity. However, these two metals, especially gold in recent times, probably are less subject to extreme fluctuations in their demand and supply than any other commodities.

Through centuries of blundering experimentation, man gradually rejected one commodity money after another and

finally settled on silver and gold. Without realizing it, he was searching for money materials which scored highest on the seven qualities needed in an ideal money. In the next chapter we shall see how gold finally displaced silver as "the" money, pushing silver into a subordinate position along with nickel and copper. Before going farther, however, with the story of gold and silver, let us see why money is coined.

Aes–Early Type–Reduced
Ancient Rome



Alexander the Great–325 B.C.

Coin of Ptolemy-Ancient Egypt

"Widow's Mite"–Judea
Courtesy, Farran Zerbe

EARLY COINS

Gold, silver, and bronze coins were in circulation around the Mediterranean Sea more than 2,000 years ago.

D. WHY WE HAVE COINAGE

(Uniform pieces of money needed; government monopoly of coinage.)

By coinage we mean the manufacture of metallic money. It is not absolutely necessary to have coinage, since the metals can circulate in the form of lumps, "nuggets," and "dust." Such a system, however, requires careful weighing to determine how much metal is being offered, and careful testing to determine how pure the metal is. Since these precautions must be taken in the case of each transaction, if one is to avoid the danger of being cheated, the inconvenience becomes serious. This caused private individuals, even in early times, to stamp the weight on pieces of metal. This stamping, when honestly done, certified the correct weight, and was the first step in coinage. Merely stamping the weight on a piece of

metal, however, did not prevent dishonest persons from shaving portions of the metal from the coin. To make tampering difficult, the designs were gradually made more and more elaborate and came to cover the entire surface of the coin, while the circular shape with indented edges made "clipping" of the piece less likely.

In some cases the ruler of the country looked after coinage matters, in other cases it was left to private individuals, while at times both engaged in the practice simultaneously. In the United States private coinage was not prohibited till 1864. Prior to that date a considerable variety of privately manufactured gold coins were in circulation along with government-made coins.

Coinage is now a government monopoly. — There are several objections to private coinage. In the first place, there is lack of uniformity. When many different individuals are issuing coins there are certain to be many different sizes and shapes of coins in circulation side by side. Under these circumstances, a person might easily be cheated if he were to accept an inferior coin at its face value. In the second place, private coinage offers an irresistible temptation to some persons to issue coins having the proper weight but containing some base metal mixed with gold. These disadvantages of private coinage call for coinage by some one single authority, whose stamp every one will trust. This single authority is nowadays the government; hence we find all modern governments reserving to themselves the sole right to coin money. The law reserving this right to the government carefully defines the various coins to be issued, provides for one or more mints to manufacture the coins, and imposes severe penalties upon counterfeiting.

In deciding upon the shape and designs for coins the government aims at four principal objects:

1. To prevent counterfeiting. With the aid of elaborate machinery, coins can be so made as to discourage the counterfeiter from attempting to imitate them.

2. To prevent removal of metal. Both the designs on the faces of the coin and the indentations on the edge make the removal of metal likely to be quickly detected.

3. To reduce abrasion in ordinary use. In order to prevent wearing away of the coin, a slight rim is raised around the edge. This catches the wear and tear and prevents the face of the coin from being worn down by use. Incidentally, this raised edge makes easier the stacking of coins in places where much money is handled.

4. To serve an artistic and sometimes a historical purpose. Many coins carry beautiful designs which are genuine works of art. Historical events, such as the admission of states and great expositions, are sometimes commemorated by striking off special coins.

Summary. — When a group has no one commodity recognized as money, that group has serious difficulties in carrying on trade. The members of the group must barter, and barter has three serious disadvantages: the difficulty of finding some one who has what a person wants and wants what that person has, the inevitable losses due to the fact that many commodities are indivisible, and the baffling and ever-varying number of exchange ratios existing. These disadvantages of barter led early to the adoption of some one commodity as money. A long list of commodities has been used at various times and places as money. These commodity moneys served the two fundamental purposes of money — to measure the worth of other things, and to act as a medium of exchange. Gradually the precious metals, gold and silver, won their way to the top of all the commodity applicants for money because these precious metals

score higher than other commodities in the seven qualities which an ideal money should possess. The coinage of metals into money, which at first was a private matter, has been taken over by the government in order to provide uniform and trustworthy coins.

QUESTIONS

1. Define or explain:

(*a*) Barter
(*b*) Measure of Value
(*c*) Medium of Exchange
(*d*) Exchange Ratios
(*e*) Money
(*f*) Coinage

2. Why does barter exist among boys on the playground to-day? Which of the three disadvantages of barter is most seriously felt among the boys on the playground?

3. Even though no coins were available for circulation in the South Sea Islands, might they have had a money? What service would their money have performed? Illustrate each service.

4. In colonial New England corn sometimes served as money. If corn were stored in a warehouse or granary and the owner carried about with him a receipt or certificate of storage, would that receipt or certificate be good paper money? For what purposes would it be better than the corn itself?

5. When the Virginia Company imported young women to be sold as wives to the settlers, the price per woman was one hundred pounds of tobacco, later raised to one hundred fifty. Was tobacco in this case serving both or only one of the principal functions of money?

6. Explain in which of the seven requisite qualities of a good money each of the following fails: (*a*) blocks of ice, (*b*) sheep, (*c*) diamonds, (*d*) canned peaches, (*e*) iron, (*f*) copper, (*g*) wheat.

7. Summarize the reasons why gold and silver became the commodities adopted in modern times for money.

8. What are the advantages of coined money over uncoined money? What are the advantages of government-coined money over privately coined money? Why do you think our government permitted private coinage until as late as 1864?

9. "And Ephron answered Abraham saying unto him,

"My lord, hearken unto me: the land is worth four hundred shekels of silver;

". . . And Abraham weighed to Ephron the four hundred shekels of silver, . . . current money with the merchant" (Genesis XXIII: 14–16). Judging by this incident, what commodity was money among the ancient Hebrews? Was the money coined or not?

10. Many of the coins in the Orient to-day have a square hole in the center. What do you suppose is the reason for this?

11. Examine the design of some of our American coins. Why are not both faces of a coin alike? Why do silver and gold coins have indented edges, while nickel and copper coins do not? Why is the rim made higher than the center of the coin?

TOPICS FOR FURTHER STUDY*

1. The Use of Commodities, Other than Metals, as Money:
   White, *Money and Banking*, chap. I.
   Phillips, *Readings in Money and Banking*, chap. II.
   Moulton, *Money and Banking*, pp. 46–66.
   Kinley, *Money*, chap. II.
   Magee, *Introduction to Money and Credit*, pp. 23–36.
   Foster and Catchings, *Money*, chap. III.

2. Why Gold and Silver Have Become Money in Modern Times:
   Moulton, *Money and Banking*, pp. 66–74.
   Phillips, *Readings in Money and Banking*, chap. III.
   Scott, *Money and Banking*, Sixth Edition, pp. 14–21.

3. Development of Coinage:
   White, *Money and Banking*, chap. II.
   Scott, *Money and Banking*, Sixth Edition, pp. 68–81.
   Moulton, *Money and Banking*, pp. 75–80.
   Moulton, *Financial Organization*, Revised Edition, pp. 61–64.
   Kinley, *Money*, chap. III.

* Bibliographical information on all references cited in this text is given on page 485.

CHAPTER II

GOLD MONEY AS STANDARD MONEY

A. Gold Triumphed over Silver
B. Gold Coinage in the United States

In the preceding chapter we have seen how barter gave way to the use of money and that various commodity moneys gave way to metallic money of gold and silver. We also observed why money is coined and why coinage has passed into the hands of the government. In this chapter we shall see why gold triumphed over silver as our standard money and the principles underlying our government's coinage of gold.

A. Gold Triumphed over Silver

(Difficulties of the double standard; Gresham's law; meaning of the gold standard)

The double standard was first tried. — During the seventeenth and eighteenth centuries gold and silver were being used as money throughout Europe, although staple agricultural products were money in the rural sections of both Europe and Europe's colonies. Of these two so-called standard metals, gold and silver, gold was the scarcer and the more valuable. Throughout the past three centuries (for which period we have trustworthy figures), gold has been from fourteen to forty times as valuable as silver; that is, an ounce of gold would buy fourteen ounces of silver at the time silver had its highest value and would buy forty ounces of the

"white metal" when silver was cheapest. The supply of the two metals in relation to the demand for them was responsible for these values. Since silver was the cheaper and the more abundant metal, it was more widely used than gold, both in manufacturing articles and as money. Its wide use in England is shown by the fact that the English unit of money (the pound sterling) was originally a pound of sterling silver, while in colonial America, although coins were scarce, Spanish silver dollars were circulating more commonly than any other coin. Gold, during this period (the seventeenth and eighteenth centuries), was too scarce to be available as a hand-to-hand currency, although it was used in the important trading centers of Europe in large transactions.

Such was the situation in 1789 when the American colonists had won their independence and were setting up their own government. The Constitution had given Congress the power "to coin money and regulate the value thereof." Acting under this provision, Congress in 1792 legislated as follows:

> That a mint for the purpose of a national coinage be and the same is established.
>
> That there shall be, from time to time struck and coined at the said mint, coins of gold, silver, and copper, of the following denominations, values, and descriptions. (Here follows a list of coins, their value, their weight, and the amount of pure metal and alloy in each.)
>
> That the proportional value of gold to silver in all coins shall be as fifteen to one; that is to say, every fifteen pounds weight of pure silver shall be of equal value in all payments with one pound weight of pure gold, and so in proportion as to any greater or less quantities of the respective metals.
>
> That it shall be lawful for any person or persons to bring to the said mint gold and silver bullion, in order to their being coined; and that the bullion so brought shall be there assayed and coined, and that free of expense to the person or persons by whom the same shall have been brought.

Thus, falling in line with the practice of other nations, we made both gold and silver standard money; declared one

unit of gold, such as an ounce, fifteen times as valuable for making payments as an ounce of silver; and provided for the coinage of the metals. Now let us see why the system did not work satisfactorily.

The need for a more accurate measure of value. — So long as business operations were few and simple, a rough and inaccurate measure of value was adequate. During the eighteenth century, for example, America was overwhelmingly agricultural in its life. The farmer and his family pretty largely took care of themselves. There were few occasions for buying or selling, and still fewer for borrowing or lending. In such a simple society coins were naturally rare, since there was little use for them. The few trading operations were usually carried on either by barter or by the use of some staple agricultural product as a medium of exchange.

During the nineteenth century, however, conditions changed. The factory system invaded our country, drawing men, women, and children from farming to town life, where they received money wages, which in turn had to be spent for the necessities of life. Factory managers had to purchase not only labor but all kinds of materials with money.

Their product likewise had to be sold for money. With the increase in buying and selling came an increase in the merchant class, while the growing use of money brought into existence more and more banks. Naturally all these classes — wage-earners, manufacturers, merchants, bankers — not only found agricultural products impossible as money, but came to demand that metallic money should be safe and reliable. Not all metallic money during the nineteenth century was safe and reliable. For example, privately coined five-dollar gold pieces varied from about $4.30 to $5.00 in value. Furthermore, under the law of 1792 both gold and silver were freely coined at the mint, and payments could be made in

either metal. Is it strange therefore that this system of making both gold and silver freely coinable and payable for debts should prove unsatisfactory? Is it not evident that as the value of the two metals shifted, payments would be made in the cheaper one? And is it not clear that in the payment of a long-standing debt this would be cheating the person receiving the money just as truly as though a light-weight gold coin had been passed for a full-weight one? Let us take an example.

Suppose in the bullion or metal market one ounce of gold would buy sixteen ounces of silver. Suppose at the same time, as was actually the case after 1792, our government recognized fifteen ounces of silver as equal to one ounce of gold, when it came to paying taxes or making coins at the mint. Obviously people would use silver in paying debts and taxes since fifteen units of silver were equal to one unit of gold for such purposes, and a person could obtain sixteen units of silver in exchange for one of gold in the market. Under such circumstances we should expect gold to disappear as money and silver money to come into circulation and be used for making payments, which was precisely what happened in this country after 1792. On the other hand, if the market relation had changed until only fourteen ounces of silver could have been bought with one ounce of gold, and the government had allowed the fifteen-to-one relation to persist, so far as debts, taxes, coinage, etc., were concerned, then people obviously would have used gold as money while silver would have been left in bullion form.

This plan of recognizing two things as standard money and trying to keep them in circulation side by side has produced trouble over and over again. At times silver has driven gold out of circulation, only to be driven out by gold at other times. When heavy issues of paper money have been made

and the law has declared paper money equal to metallic money in making payments, the paper money is used and the metallic money is hoarded or shipped to foreign countries to buy goods. This tendency of one kind of money to drive out another is usually spoken of as Gresham's law, named from Sir Thomas Gresham, one of the advisors of Queen Elizabeth. Gresham's law is usually stated as follows:

When two kinds of money circulate side by side, the cheaper tends to drive the dearer out of circulation.

That the operation of Gresham's law causes dissatisfaction in the business world goes without saying. Whereas business desires stability and certainty in money matters, there is uncertainty whenever Gresham's law is operating. It is not surprising therefore that business men insist on such changes in the money system as shall prevent this tendency from asserting itself.

The single standard of gold emerges. — The matter of making the money system more certain and reliable by using one rather than two metals as standard money first became an issue in England. During the eighteenth century England's manufacturing and commercial businesses developed more rapidly than those of any other country. By the early part of the nineteenth century business was demanding reform in the money system. In 1816 the English Parliament passed legislation providing that thereafter gold only should be standard money; silver thereupon became, like copper, only a material for making pieces of change.

Other nations did not at once follow England's example. Gold was scarce and the other nations were afraid they could not obtain enough of it to satisfy their monetary needs. On the other hand, they did not think it advisable to drop gold and adopt the single standard of silver, for while that might relieve them of the operation of Gresham's law, it would

make it difficult for them to carry on commerce with a gold standard country like England. Hence other nations drifted

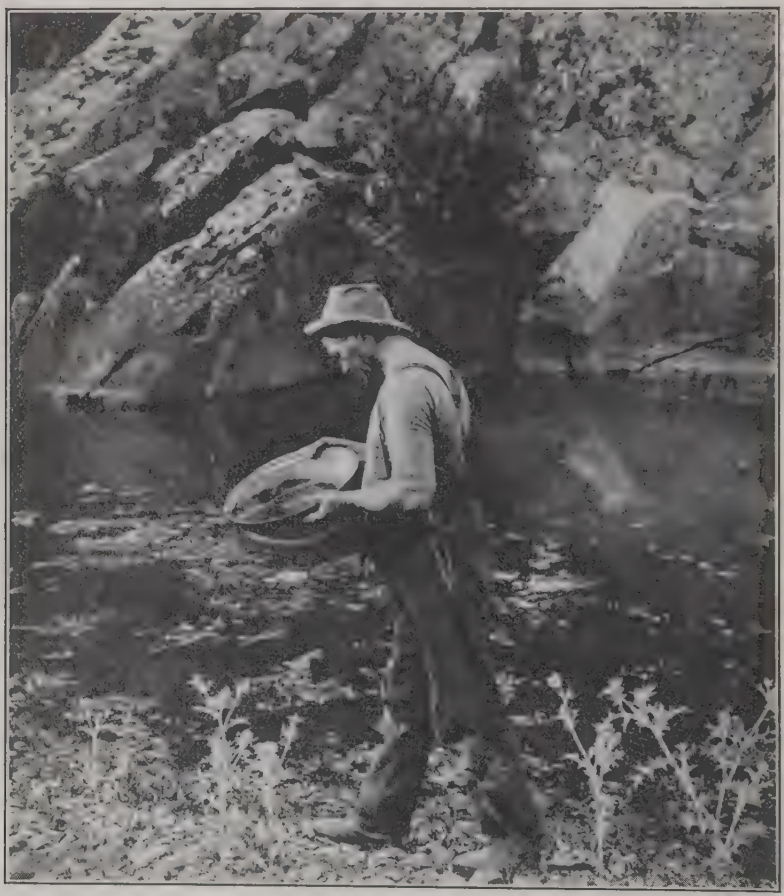


Photo from Ewing Galloway

THE OLD WAY OF MINING GOLD

Prospectors "panned" the gold, picking out the particles found in the gravel and dirt. The California "forty-niners" mined typically in this fashion.

along on the double standard until the latter part of the century.

With the discoveries of gold in California and Australia about 1850, there occurred a striking increase in the world's

Photo from Ewing Galloway

ONE OF THE NEW WAYS OF MINING GOLD

Hydraulic mining in Alaska. Whole mountain sides are washed away by hydraulic pressure, the gold being caught in sluices as it washes down with the dirt.

supply of that metal. The world output by 1830 was about 450,000 ounces annually; by 1855 it was running at the rate of over 6,000,000 ounces annually. Toward the close of the

century, the most prolific gold fields in the world were opened up in South Africa; about the same time more effective processes of mining and of extracting gold from ore were discovered. The result was that by 1900 the output had risen to over 12,000,000 ounces a year, and has remained well above that figure ever since.

During the latter half of the nineteenth century, therefore, the nations which desired to follow England in the adoption of the single gold standard found it possible to do so. Our own country dropped silver as standard money in 1873. By the end of the century, every commercially important nation on earth had subordinated silver and adopted the single standard of gold.

What the gold standard means. — When a nation adopts the gold standard, four things are implied:

1. A unit of gold becomes the measure of value for everything else. Our unit is the gold dollar; hence the gold dollar is the standard by which we measure and express the worth of all things.

2. The government offers unlimited coinage to the holders of gold bullion. To no other metal, when a country has adopted gold as its standard, is this privilege of unlimited coinage extended.

3. Gold may be used in payment of debts. Other money is frequently given this privilege by law, but the gold standard carries with it such privilege for gold. Whatever forms of money may be legally tendered in payment of debts are called "legal tender."

4. The gold standard signifies the intention of the nation to redeem all other kinds of money with gold. This means that a person may present his silver or paper money to the appropriate government office or to designated banks and receive gold in exchange. When the government refuses to

redeem its paper money or other money with gold, it is no longer completely on a gold-standard basis.

Having seen how gold came to be the supreme metal for purposes of standard money and what is meant by standard money, we may now inquire how we get gold coins into circulation.

Photo from Ewing Galloway

FIVE-POUND GOLD NUGGET

Found by two prospectors in California. Value about $1,650. Such "finds" are rare, most of our gold being found in small particles, or in ore, mixed with other metals.

B. GOLD COINAGE IN THE UNITED STATES

(Free and unlimited coinage; number of gold coins unregulated by the government; certificates circulate in place of coin)

Our system provides for free and unlimited coinage. — The coinage law of 1792, cited on page 18, made it lawful for any person to bring gold and silver bullion to the government mint, there to be coined into money. When our

government discontinued the double standard of gold and silver in 1873, private individuals no longer enjoyed the privilege of bringing silver bullion to the mint to be made into dollars. But the privilege of bringing gold bullion to the mint to be made into coins has remained to the present day. This privilege is usually referred to as "free coinage." It is free in the sense that any one and every one is free to bring to the mint all the gold he desires to bring. Since private individuals may bring unlimited amounts of gold to the mints, free coinage is sometimes aptly referred to as "unlimited coinage."

Gold in the pure state is not cast into coins, because pure gold is too soft to make satisfactory coins. We therefore alloy the pure gold with pure copper. Copper mixed with gold makes a very hard alloy, and the mixture retains the bright yellow luster of the gold. The alloy is in the proportion of nine units of pure gold to one unit of pure copper; hence gold makes up nine tenths of the total weight and copper one tenth. If a person brings pure gold and pure copper in these proportions, no charge is made for coinage. In other words, there is "gratuitous" coinage of pure gold. But if a person brings impure gold to the mint, the government will charge him for assaying or analyzing the metal and for refining or purifying it.

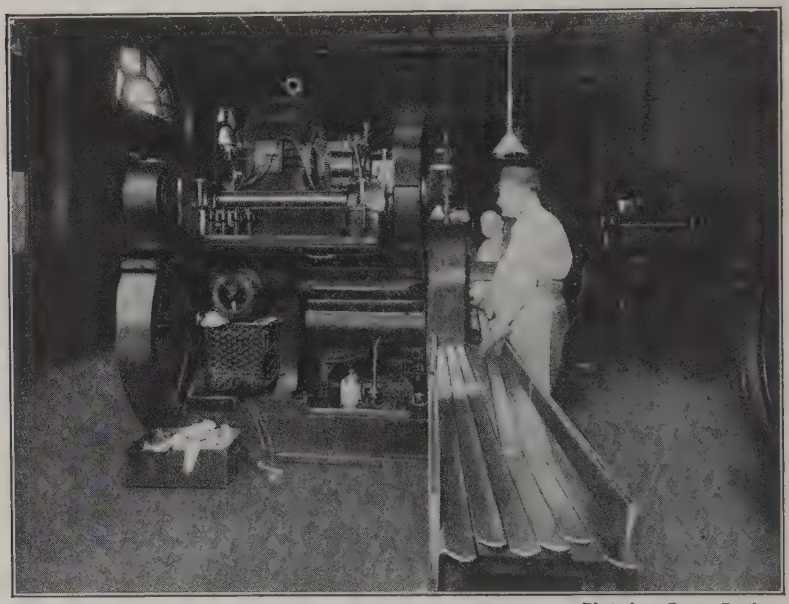
Suppose a gold-mining company presents at the mint 116,100 grains of pure gold and one ninth as much copper (12,900 grains), and asks for ten-dollar gold pieces; how many would the company get? Since Congress has ordered that 23.22 grains of pure gold shall, with 2.58 grains of pure copper, constitute one dollar, the company would receive as many ten-dollar gold pieces as 232.2 (the number of grains of pure gold in one ten-dollar gold piece) is contained in 116,100, or 500 ten-dollar gold pieces. This means simply that the gold in a ten-dollar gold piece is worth ten dollars.

Another way of computing the amount of money due the mining company is to figure on the basis of $20.67 in money for each *ounce* of pure gold brought to the mint. This $20.67 is derived from the weight of the gold dollar given in the preceding paragraph; 23.22 grains make one dollar; there are 480 grains (Troy weight) in one *ounce;* 480 divided by 23.22 equals $20.67, which is the number of gold dollars in one ounce of pure gold.

Gold bullion may be purchased from the government. — Not only does our government offer free coinage to the holders of gold bullion, but it offers to sell pure gold to the public at the mint price, 23.22 grains per dollar. Some gold is kept in bars for this purpose. Or if a person prefers to obtain pure gold by melting up gold coins and extracting the copper, he may do so. There is no prohibition against melting up gold coins, or for that matter, any other kind of coins. There is a prohibition against mutilating or defacing coins, and then putting the coins back into circulation. Since gold may be obtained from the government mint at $20.67 per ounce, and since the government will pay $20.67 per ounce for gold, it is clear why gold never varies in price. No one will pay more than $20.67 per ounce if he can get it from the government at that price; and no one will sell gold for less than that price because the government mint offers to give him that amount per ounce. Under a gold-standard, free-coinage system, there can be but one price for gold.

What governs the amount of gold coins? — Since the public is permitted to present to the mint for coinage unlimited amounts of gold bullion, and since the public may also reverse the process and melt up for manufacturing purposes unlimited amounts of gold coin, it is evident that whether we shall have much gold going into coins and little into manufacturing uses, or much into manufacturing and little into

coins is a matter that is left to the preference of private individuals. It is estimated that the demand on the part of the public for gold articles, such as watches and jewelry, causes between one third and one half of all gold to go into manufactured forms; the balance goes into money. While at



PREPARING TO MAKE GOLD COINS *Photo from Brown Brothers*

The first step in coinage is assaying, or analyzing, the metal presented at the mint. Then the gold is refined by removing all foreign substances. When the copper has been added, the ingots are passed through steel rollers, flattening the metal into strips, as shown above.

one time a third of the gold might be in manufactured forms, at another time the amount used for such purposes might be more or less than a third. If a fad of wearing gold nose rings should sweep over the country, it would cause the withdrawal from the mint of large amounts of gold now in money form. Much of this gold would doubtless return into money

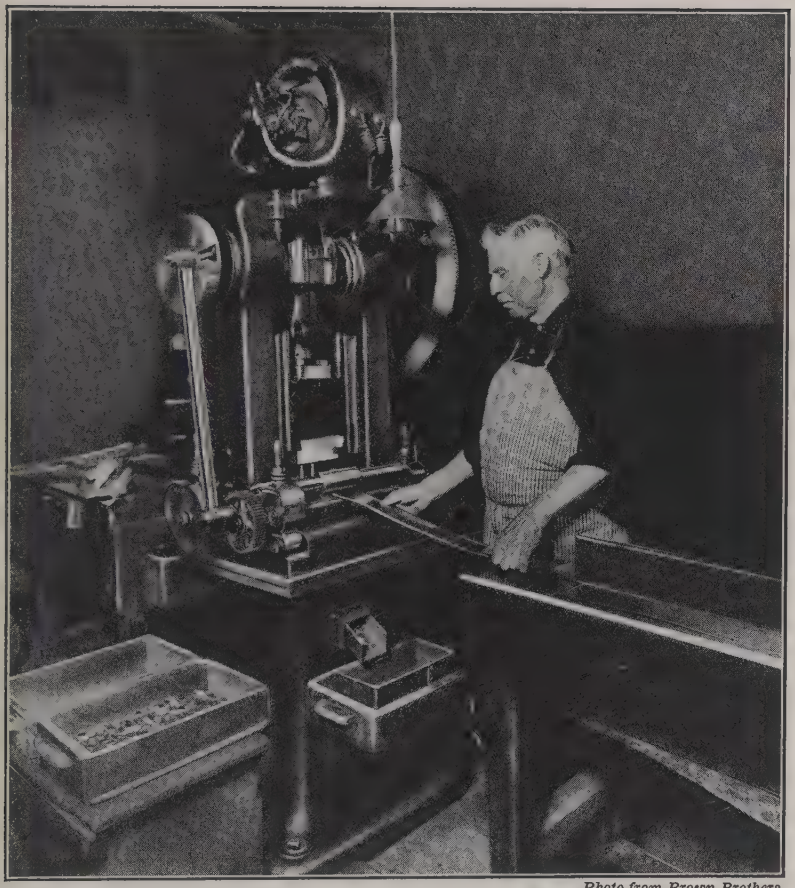


Photo from Brown Brothers

STAMPING OUT THE COINS

The final step in coinage is feeding the strips into the coining machines. These machines stamp the design on both sides, indent the edge, and raise a slight rim or collar around the edge. This rim catches the wear and thus reduces abrasion of the coin. The finished coins drop into the box below. — Our government is now operating a mint in Philadelphia, one in Denver, and one in San Francisco.

form when the fad had spent itself. Thus, gold is passing from the mint to the manufacturers or other users of gold; at the same time gold is coming to the mint from mining companies and others desiring to convert the gold bullion into coin. The mint resembles a dealer, buying and selling (in this case, gold). But while ordinary dealers, as a rule, buy at one price and sell at another price, the mint, as noted before, buys and sells at the same price, namely $20.67 per ounce for pure gold. As a matter of fact, practically all gold mined in the United States is presented straightway at the mint, as the most convenient way of disposing of it. Those desiring gold for private uses buy from the mint. Whatever is not purchased for private purposes remains as money.

Theoretically, therefore, the only limit to the amount of gold coin that might be placed in circulation is the total amount in existence. New mines might be discovered and the gold taken to the mint for coinage; persons having gold watches, rings, plated ware, and gold in various other forms might take this gold to the mint; gold bullion, coins, and articles from abroad might be imported and presented at the mint; some one might discover a cheap process of extracting gold from sea water (since sea water contains gold). While all these things might happen, there are, as a matter of fact, limiting factors at work preventing such a rush. Gold comes out of the earth in limited amounts (at present, approximately 20,000,000 ounces, or about $400,000,000 worth annually from all mines), and much of it goes into manufactured forms. The expense of such practices as bringing gold articles from abroad or of extracting gold from sea water is so great that few attempt it. Moreover, gold is shipped from one country to another in making payments, and so gets into circulation in countries which have no gold mines of their own. Thus, while the government takes no action to regu-

late the supply of gold coins, forces in the mining and commercial worlds are at work, which do control the supply, both in the world at large and in each particular country.

Gold coins are not found extensively in circulation. — In deciding what denominations of coins shall be issued by the mint, Congress considers primarily the convenience of the public. Six different gold coins have been authorized, as the accompanying table shows. Of these, the one-dollar

LEGAL WEIGHT AND FINENESS OF THE GOLD COINS OF THE UNITED STATES — THEIR DIAMETER AND THICKNESS

Denominations authorized		*Grains of fine gold contained*	*Grains of copper alloy contained*	*Total weight, grains*	*Diameter, 20ths of an inch*	*Thickness, 1,000ths of an inch*
Double eagle . .	$20.00	464.40	51.60	516.00	27	77
Eagle	10.00	232.20	25.80	258.00	21	60
Half eagle	5.00	116.10	12.90	129.00	17	46
Three dollars . .	3.00	69.66	7.74	77.40	16	34
Quarter eagle . .	2.50	58.05	6.45	64.50	15	34
One dollar . . .	1.00	23.22	2.58	25.80	11	18

and the three-dollar pieces have been discontinued, probably because they were regarded as unnecessary and inconvenient. Thus, while the gold dollar is the standard by which we measure the value of all things, we do not actually coin it.

While individuals are at liberty to use gold coins, few do so, since these coins are rather heavy. Paper money is preferred to the coins themselves. The Treasury of the United States is authorized to receive deposits of gold coin and bullion and issue in exchange *gold certificates*. These paper certificates are therefore merely receipts, stating that gold coin has been deposited in the Treasury equivalent to the amount named on the certificate.

Summary. — At the beginning of the nineteenth century gold and silver had won their way over all other candidates for money. During that century, the difficulties of carrying on business under the double standard, together with the great increase in the world's output of gold, brought all the important nations to the single standard of gold. Under the gold standard, our government makes no attempt to control the quantity of gold coin in the United States. Gold bullion may be freely cast into coins, and coins may be freely cast into bullion. The government will buy or sell pure gold at a price which always remains the same, $20.67 per ounce. Provision is made for issuing gold certificates to those who prefer paper money to gold coins.

QUESTIONS

1. Define or explain:
   (*a*) Gold standard
   (*b*) Double standard of silver and gold
   (*c*) Free coinage
   (*d*) Gold certificate
   (*e*) Gresham's law

2. Could the difficulties of the double standard have been avoided just as well by dropping gold and taking the single silver standard? Why did the nations not do it in that way?

3. Suppose no important gold discoveries had been made in the past century, and that the California and Australia deposits had been of silver instead of gold. How might the money systems of the world have been different to-day from what they are?

4. If heavy issues of paper money cause Gresham's law to operate, what do you think happened to the metallic money in the European countries which issued huge amounts of paper money during and after the World War?

5. If there were no such thing as coins, could a nation have the gold standard? Why or why not?

6. In California about 1850 there was a great deal of gold money in circulation which was not coined by the government mints. Why was this? What disadvantages would one have encountered in doing business then?

Could values be measured and expressed in dollars without government-coined dollars in circulation? What is a dollar?

7. If a person melted up 100 five-dollar gold pieces, how many grains of gold would he have? How many of copper?

8. If a "second-hand man" had collected 300 gold watchcases and wanted to convert them into money, could he take them to the United States mint? If so, how would the Director of the mint know how much to pay him for the watchcases? Would he pay varying amounts at different times? Why?

9. Suppose a retailer orders a large shipment of gold-plated ware from a manufacturing jeweler; suppose the manufacturer is out of gold and that he estimates it will take 180 ounces of pure gold to make up the order. Where may he get the gold? How much will the 180 ounces cost him? Would it have cost him the same in 1900 as in 1930?

10. Why does not the government control the amount of gold coin in the United States? Would it be better if the government did control it? Give your reasons.

11. Is a person's wealth increased by changing gold bullion which he owns into coin? Explain.

12. Is a country's wealth increased by exporting $100,000 worth of cotton and taking $100,000 in gold in exchange? Why?

13. For what purposes is coined gold superior to uncoined gold? For what uses is uncoined gold superior?

14. Summarize the reasons why modern nations have adopted the gold standard.

15. State just what is meant by the *gold standard*.

TOPICS FOR FURTHER STUDY

1. Gresham's Law and the Double Standard:

Moulton, *Money and Banking*, pp. 106—33.
Phillips, *Readings in Money and Banking*, chap. VI.
Scott, *Money and Banking*, pp. 24–31.

2. The Gold Standard:

Scott, *Money and Banking*, pp. 50–58.
White, *Money and Banking*, chaps. IV, V, VI.
Edie, *Money, Bank Credit, and Prices*, chap. III.

CHAPTER III

SUBSIDIARY MONEY: SILVER DOLLARS AND FRACTIONAL COINS

A. The Position of the Silver Dollar in Our Monetary System To-day

B. Our System of Fractional Currency

In the preceding chapter we have seen how the United States, in common with the other nations, had at the beginning of the nineteenth century the double standard of silver and gold, usually referred to as "bimetallism"; how the operation of Gresham's law proved the money system unreliable while business was expanding and needing a more reliable money; how England took the lead in discontinuing the double standard, followed gradually by the other nations as the increasing output of gold mines made larger supplies of the yellow metal available. We have seen also that, when the double standard gives way to the single standard of gold, we have free and unlimited coinage of gold only; and that this unlimited coinage system gives us our supply of gold coins.

Now the question is: "What about silver?" It is common knowledge that we have silver dollars in circulation to-day. How do they get here?

A. The Position of the Silver Dollar in Our Monetary System To-day

(The disappearance of the silver dollar prior to 1873; the struggle to restore free coinage; the purchase of bullion and coinage of dollars between 1878 and 1893)

The silver dollar has had a long and reputable career. The most common coin in the American colonies was the Spanish silver dollar, which came into circulation here through trade with the West Indies. It not only served as a convenient medium of exchange, but, more important, it educated our people to the idea of the dollar as the unit for measuring and expressing the value of goods. While in a few localities the English pound and shilling were the prevailing measure of value, in many more localities the Spanish dollar was the measuring unit. During the Revolutionary War the public debt and the paper currency issued were expressed in dollars. Indeed we may thank the Spanish silver dollar for the fact that, when Congress created our monetary system in 1792, the dollar rather than the pound was made the unit of value. Furthermore, we adopted the weight and fineness of the Spanish silver dollar as the official weight and fineness of our own silver dollar, namely $371\frac{1}{4}$ grains of pure silver, with alloy of pure copper sufficient to make the total weight 416 grains.[1] After our national mint was established at Philadelphia, many of the Spanish silver dollars in circulation were recoined into American silver dollars under the free coinage provision of the law (see page 18).

Under free coinage, silver at first came into circulation, then later disappeared from circulation. — We have already

[1] In 1837 the weight of the silver dollar was reduced to $412\frac{1}{2}$ grains by reducing the amount of copper alloy. The amount of pure silver in the dollar remained $371\frac{1}{4}$ grains, which was $\frac{9}{10}$ of the total weight, while the pure copper was made $41\frac{1}{4}$ grains or $\frac{1}{10}$ the total weight. The weight and fineness ordered by this law have remained to the present day.

observed that in the first coinage law Congress ordered free and unlimited coinage of both gold and silver, and decreed their relative values to be 15 to 1, that is, 15 units of silver were equal to 1 unit of gold in making payments. This meant that if a merchant priced an article at $10, a person might buy that article by offering either gold or silver, but if silver were offered, the customer would have to give 15 times as much by weight as if gold were used. Since the 15 to 1 relationship was established by law in making payments, the law had to establish the same relationship in making coins. Therefore the law of 1792 decreed that the silver dollar should contain 15 times as much pure silver by weight as the gold dollar should contain pure gold ($371\frac{1}{4}$ grains of pure silver in a dollar, $24\frac{3}{4}$ grains of pure gold in a dollar).

Immediately, the principle stated in Gresham's law began to operate. It was cheaper to use silver in making payments than it was to use gold, because in the bullion market gold would buy over 15 times its own weight of silver. Hence, gold bullion was exchanged for silver bullion and the silver was used for making payments and was presented to the mint for making coins. Although legally we were operating on the double standard, actually we were on the single standard of silver. The cheaper metal (silver) drove out of circulation the dearer metal (gold). Silver, supplemented by paper money in the form of bank notes, was the medium of exchange.

In 1834 and 1837 Congress altered the coinage law so as to make the relationship between the two metals 16 to 1.[1] Thereafter, both in making payments and in making coins, 16 units of silver by weight were required to equal one of gold. To accomplish the change in coinage, the pure gold in a dol-

[1] The exact relationship established was 15.998 to 1, but it is commonly referred to as 16 to 1.

lar was reduced to 23.22 grains, while the pure silver in a dollar was left at $371\frac{1}{4}$ grains.[1] This new relationship again brought Gresham's law into operation, but with the two metals in reversed position. Gold was now the cheaper, it flowed to the mint, was used in making payments, and drove silver out of circulation as money. Even the silver half-dollars, quarters, and dimes were melted up to be used as bullion. The dearth of small change finally became so serious that in 1853 Congress reduced the weight of these fractional pieces about 7 per cent, which was sufficient to keep them in circulation.

Thus the tables were turned. Gold now was preferred over silver in making payments, and after the California gold discoveries in 1848, more and more gold coin appeared. While legally we still retained the double standard, actually we were on the single standard of gold.

The "Crime of 1873." — In 1873 Congress was revising some of the laws relating to coinage. In listing the coins to be struck off by the mint, the standard silver dollar was omitted. At the time no one paid any attention to the omission nor cared particularly, because, as we have seen, silver was worth more in bullion form than in coin. Many persons three score years of age could have testified that they had never seen a silver dollar. It was apparently an obsolete coin.

Soon, however, events conspired to cheapen silver. Rich, new veins of silver were discovered in the Rockies and the

[1] These figures have remained unchanged to the present day. Since the proportion of pure copper alloy is the same in both coins, namely $\frac{1}{10}$ of the total weight, our dollars now consist as follows:

Silver Dollar		*Gold Dollar*	
Pure silver,	371.25 grains.	Pure gold,	23.22 grains.
Pure copper,	41.25 grains.	Pure copper,	2.58 grains.
Total weight,	412.50 grains.	Total weight,	25.80 grains.

state of Nevada. Then, too, most of the nations of Western Europe gave up the double standard at this time, adopting the single gold standard and closing their mints to the free coinage of silver. Germany even sold a great amount of her silver on the world markets. By 1875 a unit of gold would buy $16\frac{1}{2}$ units of silver, and by 1876, the ratio was about $17\frac{1}{2}$ to 1. Had the mints been open to the unlimited coinage of silver dollars at a 16 to 1 ratio, silver would have been rushed to the mints, thence into circulation in making payments, and gold would have disappeared as money. But no one could take silver to the mints for the law of 1873 had dropped the silver dollar from the list of authorized coins. The friends of silver were aroused; they charged that the provision omitting the silver dollar had been secretly framed and passed and that there had been a conspiracy to take away the "poor man's dollar"; they referred to the law as the "Crime of '73."

A bitter struggle followed. The silver producers were, of course, ardently in favor of restoring the unlimited coinage of silver dollars; so were the business and professional men who made their living in the silver-producing communities, since their prosperity was closely connected with that of the silver producers. These groups, however, were an insignificant proportion of the total population. They would have made little headway with their arguments had it not been for the business depression prevailing throughout the country. During most of the twenty years from 1876 to 1896, the country was suffering from "hard times." Farmers were receiving low prices for their crops, which not only caused discontent but made it impossible for many of them to pay what they had promised; unemployment was serious in the towns and cities, making it difficult for families to support themselves; many of the railroads and manufacturing indus-

tries went into bankruptcy, unable to pay what they owed, a condition which brought loss to those who were dependent on the bankrupt businesses. In this way the trouble spread throughout many classes in society.

The distress and discontent prevailing during this period were fertile soil for the agitation to restore unlimited coinage of silver. The silver champions claimed that what was wrong with the country was "not enough money in circulation." With plenty of silver dollars floating about, they argued that men would find it easier to get the money to pay their debts; that farmers as well as other producers would receive higher prices for their products, since consumers would spend more liberally, thus forcing prices upward; that most of the ills of society would be cured by making money plentiful. Not all the arguments, however, were of this nature. One Senator gravely declared in Congress that we should use the two precious metals as standard money because the Almighty intended it so "when He created these two metals."

On the other hand, there was determined opposition to restoring silver to its former place. Many pointed out that Gresham's law would operate, thus driving gold out of circulation and making it exceedingly difficult to carry on trade with the European countries, nearly all of which were then on the gold standard. All those who had loaned gold money were opposed to restoring silver, knowing that they would be repaid in the cheaper metal. To these classes were added those who feared that "tinkering with the money system would disorganize business plans and operations," and those who preferred to leave things as they were, fearing any kind of change.

Thus the lines of battle were drawn. The campaigns waxed hot in newspapers, magazines, conventions, political elections, barber shops, and corner groceries. The result

was, as frequently happens, a compromise. The champions of " free silver " were not able to get the law of 1873 repealed ; their opponents were not able to prevent the coinage of some silver dollars. The two compromise measures passed by Congress were the Bland-Allison Act of 1878 and the Sherman Silver Purchase Act of 1890.

The Acts of 1878 and 1890. — The Bland-Allison Act of 1878 required the Secretary of the Treasury to purchase from two to four million dollars' worth of silver bullion every month at prevailing market prices, coin it into dollars, and pass into circulation either the silver dollars themselves or paper silver certificates, backed dollar for dollar by silver dollars. This law remained in force till 1890, when the Sherman Purchase Act raised the amount of silver to be purchased monthly to four and one-half million ounces. This act was repealed and the purchase of silver ceased in 1893.

Under these two acts, a little over 570,000,000 silver dollars were coined, all of which remain as a part of our monetary system to-day. The silver dollar is such a heavy and cumbersome coin that few persons care to use it. There are rarely more than 70,000,000 in circulation, the balance remaining in the Treasury as security for silver certificates outstanding.

While silver dollars are sometimes referred to as " standard " silver dollars, it is evident they are not standard in the same sense that gold coins are standard. We do not permit unlimited coinage of silver, as we do of gold. The number of silver dollars is fixed at the amount now on hand and cannot be changed except by express authorization of Congress, whereas the amount of gold coin, as we have seen, is not fixed by Congress. Silver dollars now are really subsidiary money, that is, subordinate to gold ; they are useful for " making change " (for persons who care to use them), but are no longer " standard money." There is little probability that silver

will ever be restored to its lost position as a partner with gold in a double standard. Its long career as a standard metal seems to be ended.

The return of prosperity about 1897 put to rest the agitation for more silver money and permitted the final chapter in the gold-silver struggle to be written in 1900. In that year Congress passed legislation definitely affirming gold to be our standard and requiring the Secretary of the Treasury to redeem on demand all other forms of money with gold. This provision serves to keep the value of all coins and paper money equal to gold.

Our silver-gold experience may be summarized as follows:

PRINCIPAL COINAGE ACTS AND THEIR RESULTS

1792–1834	1834–1873	1873–1900	1900–
Unlimited coinage of silver and gold at 15 to 1. In the market silver was cheaper than 15 to 1, hence in this period, silver went to the mint and was used in making payments. Gold disappeared from circulation.	Coinage ratio changed to 16 to 1. In this period, gold was the cheaper, and went to the mint, while silver disappeared from circulation. In 1853 fractional silver coins were reduced in weight to keep them in circulation.	Silver dollar dropped from list of authorized coins. Soon after, silver dropped rapidly in value and would have flowed to the mint, had it not been for the law of 1873. Under Acts of 1878 and 1890, silver bullion was purchased by the Government in such amounts that when coined, it made over 570,000,000 silver dollars. These are a part of our monetary system to-day.	Gold standard officially adopted by Congress. All other forms of money to be kept equal in value to, and redeemable in, gold.

B. Our System of Fractional Coins

(Need for fractional coins; their issue and redemption)

Fractional currency necessary. — We have already noticed how money comes into existence to aid and simplify the carrying on of exchange. Both as a measure of value and as a medium of exchange, money is needed in small denominations. In measuring values, we frequently speak of objects as worth small amounts, such as thirty-nine cents. For very accurate measurements we even use a denomination smaller than the cent, namely, the mill (one-tenth of a cent). However, since Congress does not think it worth while to have one-mill or five-mill coins made, the smallest denomination we can use as a medium of exchange is the one-cent piece.[1]

In authorizing the coinage of different fractional pieces, Congress tries to consider what denominations will serve the needs of the public most effectively. We need a sufficient variety of pieces so that " change " can be quickly made, yet not such a variety that we are confused and burdened. We clearly need coins of one, five, ten, twenty-five, and fifty cents, and these we have had from the first coinage law to the present. At various times, other pieces have been coined, then discontinued: coins of twenty cents, three cents, two cents, and one-half cent.

Of what materials shall fractional coins be made? — It is not of any great importance whether our ten-cent piece, for example, is made of silver and copper alloy, or of nickel and copper alloy, or of certain other metals. Fractional coins depend primarily upon the backing of the government to give them value, rather than upon the material of which

[1] A half-cent or five-mill piece was authorized and in circulation from 1792 to 1857. It was made of copper and weighed 84 grains, hence was almost twice as large as our present bronze one-cent coin, which weighs 48 grains.

they are made. They circulate at face value because the government limits the amount in circulation, confers upon them power to make payments, and offers to redeem them in gold. Nevertheless the material of which they are made is not a matter of entire indifference. The material should have not only coinable qualities, such as malleability and durability, but also should have considerable intrinsic worth. If, for example, the material in a fifty-cent piece were worth only five cents, a tremendous temptation would be offered to private individuals to make fifty-cent pieces exactly like those made by the government mint; if the design could be correctly imitated there would be no way to tell a private coin from a government one, and there would be a handsome profit in making the private coins. On the other hand, it would not do to make the coins of such valuable raw materials that the materials were worth approximately as much as the face value of the coins, for in that case a slight rise in the market value of the materials would cause the melting up of the coins in order to sell the materials at a profit.[1]

Our government has attempted to work out a system of satisfactory fractional coins by authorizing the following:

Coins of fifty cents, twenty-five cents, and ten cents, composed of nine-tenths silver and one-tenth copper; five-cent coins composed of three-fourths copper and one-fourth nickel; and one-cent coins composed of 95 per cent copper and 5 per cent tin and zinc.

What governs the amount of fractional currency? — The amount of fractional currency in circulation is self-regulating. When individuals want small change, they go to the

[1] This was what happened to our fractional silver coins after 1837. As a result, in 1853 Congress reduced the weight of the fractional coins about 7 per cent in order to make the material in the coins worth less than the face value and thus to prevent melting them up (see page 37).

banks and exchange other money for fractional pieces. When the banks run short of fractional coins, they send to the government treasury for a new supply, delivering larger denominations of money in exchange. When the Treasury runs short, the Director of the Mint goes to the bullion market, purchases the necessary materials at prevailing prices, manufactures the coins, and places them in the Treasury ready to be exchanged for larger denominations of money. This is called coinage " on government account," in contrast to " free and unlimited coinage."

When silver is selling in the bullion market at sixty cents per ounce, the necessary silver and copper required to make a half dollar can be purchased for about twenty-five cents. When the cost of minting is added, the total cost is slightly higher, let us say twenty-six cents. When the government receives fifty cents each for these half dollars, it makes a profit of twenty-four cents on each one. If the price of silver is more or less than sixty cents per ounce, the profit in coinage is of course more or less than the amount named. Whatever the amount, the profit goes into the " silver-profit fund " in the United States Treasury.

The coinage of " nickels " and bronze one-cent pieces is on the same basis as the fractional silver coins, and the profit realized on their manufacture and sale likewise depends on the price of the materials entering into the coins.

The arrangement described above insures that there will always be *enough* fractional currency. The government guards against the danger of there being *too many* fractional coins by offering to redeem in gold all fractional coins presented at the Treasury, provided the small coins are presented in amounts of $20 or multiples thereof. By these processes of issue and redemption the public is provided at all times with the kinds of fractional money desired.

QUESTIONS

1. Define or explain:

(*a*) "Standard" silver dollar
(*b*) Coinage "on government account"
(*c*) "Crime of '73"
(*d*) "Free silver, 16 to 1"
(*e*) Bland-Allison Act
(*f*) Sherman Purchase Act
(*g*) Redemption of fractional coins
(*h*) Silver-profit Fund

2. Why do we have the "dollar" as our unit rather than the English "pound"? Was the actual dollar which served as a model for our first monetary law a silver dollar or a gold dollar? Why was it not both?

3. How do you explain the fact that the silver dollar is to-day equal in purchasing power to the gold dollar, while the silver metal in a dollar is worth only about fifty cents? Does the same explanation hold for the fractional coins which are worth more as coin than as bullion?

4. Why do not silver dollars and fractional coins drive gold out in response to Gresham's law, since silver is now a cheap metal compared to gold?

5. If we had restored free and unlimited coinage of silver at 16 to 1 after 1873, say in 1880 when silver was at 18 to 1 in the market, what would have been the effect on our monetary system?

6. Look up the present price of silver. (You find this on the financial page of many city newspapers.) Remembering that gold is worth $20.67 per ounce, what is the present market ratio between gold and silver? What would happen if we now restored free coinage of silver at 16 to 1? Why?

7. At the present price of silver, how much is the silver in a dollar worth? (There are 480 grains in one ounce.)

8. Some persons have argued that since the buyer always loses a half-cent when buying a half-dozen of anything costing fifteen or twenty-five cents per dozen, it would therefore be a good thing to have a half-cent piece coined. Do you agree? What objections are there to the proposal?

9. Do you suppose street-car fares, for example, would frequently be $6\frac{1}{2}$ or $7\frac{1}{2}$ cents instead of even amounts, if we had a half-cent piece? Who would gain and who would lose by such a change?

10. It has been argued that everything that could be accomplished by a half-cent piece could also be accomplished by a two-and-one-half-cent piece. Do you agree?

11. It has been suggested that the government mint is like a factory because it turns out fractional coins for sale. In what respects do the manufacture and sale of fractional coins resemble, and in what respects do they

differ from, the manufacture and sale of ordinary products such as wire nails, for example?

12. During the World War our government imposed a small tax on such things as telegrams, long-distance telephone messages, admission to amusement places, and so on. This created such a sudden demand for one-cent pieces at the mint that for a while the mint worked overtime. Explain the connection between the new tax law and the activity at the mint. Did the government make any profit out of the increased demand for one-cent pieces? Why or why not?

13. A great many of these war taxes were repealed a few years after the war ended. What change then occurred in the need for one-cent pieces? What became of them?

14. Why would it not be a good plan to have a law requiring the government always to put 50 cents' worth of silver into a half dollar?

15. If the government should refuse to redeem fractional coins, what would happen?

16. One seldom sees a silver dollar in the large cities, but in certain sections of the west and south they are common. The explanation offered is that in these sections there is a prejudice in favor of "hard money" and against paper money, because metallic money is *real* money, whereas paper money is only a substitute, is often dirty and disease-ridden, and has not always been equal in value to metallic money. What merit has each of these arguments?

17. During the World War silver became relatively scarce and rose to over one dollar per ounce in the market. In 1918 Congress passed the Pittman Act, authorizing the sale of about 300,000,000 of the silver dollars in the Treasury, and required that they be replaced after the war by purchase of American-mined silver at one dollar per ounce, regardless of the market price. By 1923 the repurchase had been completed, the Treasury paying one dollar per ounce to American silver producers, although most of the time silver was selling in the bullion market around sixty and seventy cents per ounce. The Pittman Act has been severely criticized on two grounds: first, that since few silver dollars are ever wanted in circulation we should not have replaced those melted up and sold; second, even granting that they should be replaced, the necessary silver should have been purchased as cheaply as possible instead of paying more than the market price.

Do you agree that we could get along as well without some 300,000,000 of those silver dollars, assuming that their place would be filled by some other kind of money?

Do you agree that "a golden opportunity to get rid of the U. S. Treasury hoard of silver dollars at a profitable price was lost" ?

18. It has been suggested that another way to get rid of the silver dollars would be to melt them up and make fractional silver coins out of them, instead of buying silver from time to time for fractional coins. What advantages and disadvantages are there in such a plan?

19. Draw up a statement of the reasons, both immediate and remote, why the United States shifted from the double standard to the single standard.

20. Are silver dollars on any different basis to-day than silver half dollars? Explain your answer.

21. Are fractional silver coins on any different basis to-day than nickel and copper coins? Explain.

TOPICS FOR FURTHER STUDY

1. The Fight for Free Silver in the United States:
   Holdsworth, *Money and Banking*, chap. III.
   Phillips, *Readings in Money and Banking*, chap. VII.
   Moulton, *Money and Banking*, chap. VI.

2. The Principles Governing Fractional Money:
   Marshall, Wright, and Field, *Materials for the Study of Economics*, pp. 458–460.
   Moulton, *Financial Organization*, Revised Edition, pp. 76–78.

CHAPTER IV

PAPER MONEY

A. Why We Have Paper Money

B. The Different Classes of Paper Money

C. Paper Money in the United States

Persons who have made deposits in banks are able to obtain goods at stores where they are well known by writing checks and passing them across the counter. These checks are as acceptable to the merchant as coin or paper money would be. It is evident, therefore, that checks perform the same sort of service in commerce that money performs. Still we do not speak of checks as money. What is the essential difference between a check for ten dollars and a ten-dollar bill? The answer of course is that a check circulates only where the person who signs the check is known, whereas the ten-dollar bill circulates anywhere and everywhere in the country. Many persons are reluctant to take checks because they do not know whether the checks are "good," but they do not hesitate to take paper money. We may therefore define paper money as paper that is *universally* acceptable in payment for goods, services, or debts. Such money is nowadays always issued by the government or by banks under government supervision. It is carefully engraved so as to make it distinctive and easily recognized.

A. Why We Have Paper Money

(Convenience; increased amount of currency; elasticity; war emergencies)

There are several reasons why we have paper money. It is a convenient substitute for coin; it increases the total amount of currency; it provides elasticity to our currency; it is sometimes issued in an emergency and remains in circulation after the emergency is over.

Paper money is a convenient substitute for coin. — Paper money is lighter and more easily handled than coins. If one were going to purchase for cash a $1,200 automobile, he would find it decidedly inconvenient to carry that amount in gold or silver coin. On the other hand, no inconvenience would be felt if paper money were carried, especially if one-hundred- and five-hundred-dollar bills were used. Not only is paper money convenient for persons who have to carry considerable sums about with them but it is also easily shipped from one place to another.

Paper money permits an existing stock of coin to go farther than the coin itself would go. — This is due to the fact that there need not necessarily be 100 per cent in coin kept in the treasury as a reserve back of every paper note in circulation. There need only be sufficient coin to insure ready redemption of all paper money presented for redemption. Whether the amount of coin backing the paper needs to be 90 per cent or only 10 per cent or some other percentage depends in large part on the degree of confidence the public has in the money system. When the public feels doubtful about the ability of the government to redeem on demand the outstanding paper money, then a large reserve is necessary to reassure the public. On the other hand, when the public feels highly confident of the government's ability to redeem its paper money on demand, then very little coin reserve is necessary. Since confidence is a difficult thing to measure, it is somewhat dangerous to allow the reserve backing up the paper money

to fall to a low point. Our own government has, since 1879, successfully supported about $346,000,000 of one variety of paper money, namely, United States notes, or "greenbacks," with a gold reserve of $150,000,000, or about 43 per cent.

Paper money gives elasticity to the monetary system. — This means that the amount of paper money in circulation expands and contracts from time to time, as occasion requires. For example, during and immediately after the recent World War, prices of everything rose considerably. Let us say, for purpose of illustration, that everything doubled in price. It is clear that if everything cost twice as much as before the war, and if money circulated at the same speed as before, we should need about twice as much money (counting bank checks and other substitutes for gold money) as before the war, since if wages were doubled, there would be twice as much money in the pay envelopes, and if all goods in the stores were twice as high in price then people would have to give twice as much money for the same goods as before, and so on with everything else. Now, since it was not possible suddenly to double the amount of gold coin in the country (for that depended on mining and importing and minting conditions), it is clear that the increase of money came from paper money and other substitutes for gold coin, such as bank checks. Under government restrictions and supervision, paper money was expanded in amount at this time. Then when prices fell (as they did for a year or two after 1920), less money was needed. At this time the amount of paper money contracted, much of it disappearing from circulation. In every good monetary system there should be provided at least one variety of money which is elastic — capable of being increased and decreased in response to the needs of business. In our own system the Federal Reserve note, to be explained presently, is an elastic paper money.

Paper money is often issued in time of emergency, such as war, and may remain after the emergency is over. — A war necessitates enormous purchases of goods by the government. Where is the government to get the money to pay for these goods? It may, through taxation, compel its citizens to surrender some of their own purchasing power to the government. The citizens would buy fewer things and the government could buy more, and so the total amount of goods bought would be the same. This would be an excellent way to finance a war, inasmuch as prices of goods would not be affected so much if the demands for goods were simply transferred from private individuals to the government. However, no war has ever been financed solely or even chiefly by taxation, for the simple reason that the people will not agree to such a sudden and drastic increase in taxes.

If taxation will not furnish the money, then the only alternative is to borrow it. One method of borrowing is to sell bonds. For example, during the recent World War, our government sold something like twenty billion dollars' worth of "Liberty Bonds." Another method is to print paper money and purchase goods with it. Bonds and paper money are very much alike. Both are methods of borrowing; they are promises to pay to the holder standard gold money later on. One difference between them is that with bonds a definite time is set when the government will pay the holder the money, whereas with the paper money the promise is to pay "on demand"; another difference is that bonds bear interest, whereas paper money does not. If the government has sufficient gold in reserve so that the people are confident they can get gold for their paper notes any time they want it, the paper notes will be as good as gold. If, however, the government has comparatively little gold, or if the government hoards its gold and refuses to pay it out, both of which

conditions are likely to exist in time of war, then the paper notes are not as good as gold and are said to be depreciated. Such paper money is usually called "irredeemable" money, or "fiat" money, since it circulates on the command or fiat of the government.

Following an emergency issue of irredeemable paper money, one of two things usually happens: (*a*) Either the amount outstanding is gradually reduced while the gold reserve is built up until the outstanding notes can actually be redeemed on demand with gold; this was the outcome of the "greenback" issues of our Civil War, which were made redeemable in gold in 1879. (*b*) Or the amount outstanding is increased to such an enormous sum that every one recognizes that it is hopeless to expect redemption, and the value of the paper money sinks to approximately zero; such was the outcome of our Revolutionary War paper money and of that issued by the Confederate States during the Civil War. Recent examples are the paper money issues of Austria and of Germany. The former became practically worthless in 1923 and the latter in 1924, the event in each case forcing a reorganization of the country's monetary system. Whatever the final outcome may be, such paper money forms an important part of the country's money during the war and frequently survives for many years after the war is over.

B. The Different Classes of Paper Money

(Representative, fiduciary, and fiat money; effects of fiat money)

Paper money may be conveniently classified as follows: representative money, fiduciary money, and fiat money.

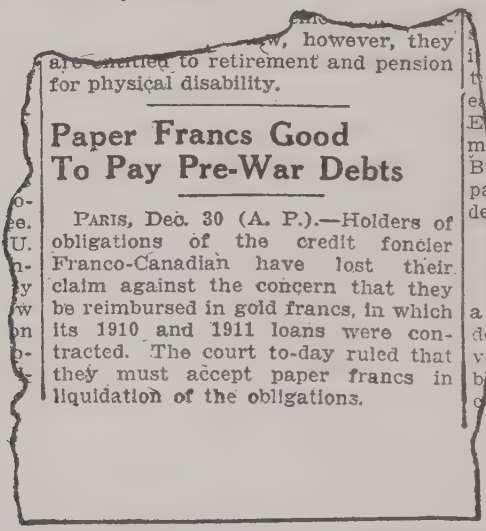
Representative paper money. — This is paper money representing coined money held in reserve, the coin reserve being equal to the paper money outstanding. Any one holding representative paper money can present it at the treasury

and obtain the coin. Hence no questions are ever raised regarding the goodness and safety of representative paper money. In our own monetary system we have already observed two examples of representative paper money; namely, *gold certificates*, backed dollar for dollar in gold coin; and *silver certificates*, backed dollar for dollar in silver dollars. In addition to these two, we have in circulation a few *Treasury notes of 1890*, which are representative money backed dollar for dollar in silver.

Fiduciary paper money. — This is paper money backed by a gold reserve less than dollar for dollar, but sufficient to insure redemption of all paper money presented. (The word *fiduciary* means involving trust, or faith, or confidence; hence fiduciary money circulates at par partly because of the trust or confidence the public holds in the government or bank issuing the money.) Examples in our own country are *United States notes* or "greenbacks," and the three varieties of bank notes, *national bank notes*, *Federal reserve notes*, and *Federal reserve bank notes*. Fiduciary money is not so unquestionably safe as representative paper money, because if something like a severe war happens to shake the confidence of the public in the ability of the government or the banks to redeem their paper money, the fiduciary paper money may depreciate in value.

Irredeemable or fiat paper money. — As suggested before, this kind of paper money usually originates in time of war, and cannot be redeemed in gold. It accordingly depreciates in value and drives gold out of circulation. For example, between 1862 and 1879, while our United States notes were fiat money, they were so depreciated that at one time a dollar note would buy only as much as thirty-five cents in gold would buy. The extent of fiat-money depreciation depends on the degree of confidence which the public has in the government's power to redeem the fiat money later on. If the quantity issued is moderate and there is a feeling that the

government will soon obtain large gold reserves, then the fiat money will not depreciate much. If overwhelming quantities are issued and it becomes evident that the government never will be able to redeem the fiat money, then the depreciation is heavy and may amount to 100 per cent, in which case the fiat money loses all its value and ceases to be money. One may wonder why a piece of paper which is not exchangeable for gold has any value at all. There are two reasons:



...w, however, they ... entitled to retirement and pension for physical disability.

Paper Francs Good To Pay Pre-War Debts

PARIS, Dec. 30 (A. P.).—Holders of obligations of the credit foncier Franco-Canadian have lost their claim against the concern that they be reimbursed in gold francs, in which its 1910 and 1911 loans were contracted. The court to-day ruled that they must accept paper francs in liquidation of the obligations.

ONE REASON WHY PAPER MONEY HAS VALUE EVEN THOUGH IT IS NOT REDEEMABLE IN GOLD

First, the government or the bank issuing it promises on the paper to pay the holder in gold, and this promise gives the paper some value so long as there is any hope that the promise will be kept; second, the government usually decrees that fiat paper notes shall be legal tender in payment of debts (see accompanying clipping above).

Some of the striking effects of fiat money are described by an observer in the following case:

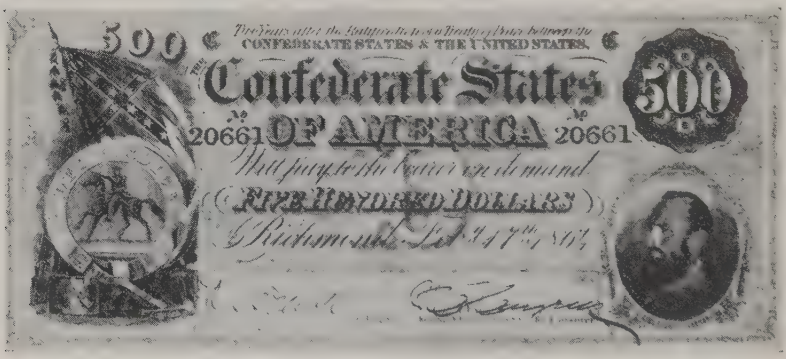
Paper currency of the Confederacy.[1] — The history of the South during the Civil War furnishes one of the best illustrations on record of the disastrous consequences of relying mainly upon the issue of irredeemable paper currency as a means of financing war. There were some slight tax levies, it is true, and some borrowing through the use of bonds, but paper money was looked to from the first as the chief fiscal resource of the government. There was only one difficulty incident to the process of printing treasury notes enough to meet all the expenses of the government; namely, the impossibility of having the notes signed in the Treasury Department as fast as they were needed. There happened, however, to be several thousand young ladies in Richmond willing to accept light and remunerative employment in their homes, and as it was really a matter of small moment whose name the notes bore, they were given out in sheets to these young ladies, who signed and returned them for a consideration. I shall not undertake to guess how many Confederate treasury notes were issued. Indeed, I am credibly informed by a gentleman who was high in office in the Treasury Department that even the secretary himself did not certainly know. The acts of Congress authorizing issues of currency were the hastily formulated thought of a not very wise body of men, and my informant tells me that they were frequently susceptible of widely different construction by different officials. However that may be, it was clearly out of the power of the government ever to redeem the notes, and whatever may have been the state of affairs within the Treasury, nobody outside its precincts ever cared to muddle his head in an attempt to get at exact figures.

We knew only that money was astonishingly abundant.

[1] Adapted from *A Rebel's Recollections*, by G. C. Eggleston, pp. 78–105. Hurd & Houghton, 1875.

Provisions fell short sometimes, and the supply of clothing was not always as large as we should have liked, but nobody found it difficult to get money enough. It was to be had almost for the asking.

Money was so easily secured, and its value was so utterly uncertain, that we were never able to determine what was a fair price for anything. We fell into the habit of paying whatever was asked, knowing that to-morrow we should have



Fiat Money — Confederate Note

to pay more. Speculation became the easiest and surest thing imaginable. The speculator saw no risks of loss. Every article of merchandise rose in value every day, and to buy anything this week and sell it next was to make an enormous profit quite as a matter of course.

The prices which obtained were almost fabulous, and singularly enough there seemed to be no sort of ratio between the values of different articles. I bought coffee at forty dollars and tea at thirty dollars a pound on the same day. My dinner at a hotel cost me twenty dollars, while five dollars gained me a seat in the dress circle of the theater. I paid one dollar the next morning for a copy of the *Examiner*,

but I might have purchased the *Whig*, *Dispatch*, *Enquirer*, or *Sentinel* for half that sum. For some wretched tallow candles I paid ten dollars a pound. The utter absence of proportion between these several prices is apparent, and I know of no way of explaining it except upon the theory that the unstable character of the money had superinduced a reckless disregard of all value on the part of both buyers and sellers. A facetious friend used to say prices were so high that nobody could see them, and that they " got mixed for want of supervision." He held, however, that the difference between the old and the new order of things was a trifling one. " Before the war," he said, " I went to market with the money in my pocket, and brought back my purchases in a basket; now I take the money in the basket, and bring the things home in my pocket."

The financial condition got steadily worse up to the end of the war. I believe the highest price, relatively, I ever saw paid, was for a pair of boots. A cavalry officer, entering the little country store, found there one pair of boots which fitted him. He inquired the price. " Two hundred dollars," said the merchant. A five-hundred-dollar bill was offered, but the merchant having no small bills, could not change it. " Never mind," said the cavalier, " I'll take the boots anyhow. Keep the change; I never let a little matter of three hundred dollars stand in the way of a trade."

Effects of fiat money. — The account of Confederate currency illustrates a few but not all of the results of fiat money. The principal troubles brought on by fiat money are the following:

1. Gresham's law operates, driving metallic money out of circulation. This process usually goes so far as to cause the disappearance of fractional coins, which necessitates printing some fiat money in fractional denominations.

2. Prices of goods rise. As was shown in the case of the Confederate paper money, higher prices are asked for commodities and services. If all prices rose to the same extent, and if all incomes went up in the same proportion, little or no harm would result. But the prices of some things are much more sensitive than others. Especially are wages likely

Wide World Photo

SHOPPING IN BERLIN WITH FIAT MONEY

The basket containing the money is as large as the one containing the cabbages. Prices of goods were raised daily as the value of money fell.

to lag behind the rise in the prices of goods, thus injuring wage earners to the benefit of their employers.

3. Debtors are able to pay their debts with cheap paper money. The case of the German professor, cited on page 2, illustrates the disastrous effect on those who have loaned gold money and are paid back in fiat money. When fiat

money is made legal tender, it proves a blessing to debtors and a curse to creditors. This evil may be avoided by providing in an agreement that the debt *must* be paid in *gold*.

4. Business plans are hampered and upset by the uncertainty of prices under a fiat-money system. Business men naturally hesitate to make contracts for the future, not knowing what the prices of goods and labor are likely to be. Producers operate on a " hand-to-mouth " basis, which does not turn out the maximum amount of goods. Strikes for higher wages are frequent, thus interfering with production. In short, business cannot run smoothly and with confidence because of the uncertainty connected with the money and price system.

5. The abundance of money creates a false sense of prosperity throughout society. People think they are getting rich, merely because everything they own is marked up to higher figures. They forget that wealth consists, not of pieces of paper, but of valuable goods, such as land, houses, food, clothing, and machinery; and that the amount of these things is not changed by printing fiat money. All the fiat money does is to cause higher prices to be set on the things which constitute wealth. This apparent prosperity breeds a spirit of extravagance and reckless speculation. Society gets intoxicated on paper money.

6. The ultimate outcome of intoxication on fiat money is that society must " sober up." If the fiat money is gradually reduced in amount, and if redemption in gold is finally established, this means a fall in prices to a gold basis, possibly to about where they were before the paper money was issued. If the fiat money is increased in amount until it becomes worthless, the paper money prices are taken off goods, and gold prices, very much lower, are restored. In either event prices fall, and people have a feeling that they are get-

ting poorer; business men curtail production as much as possible because they are likely to lose money by producing goods for a market in which prices are declining; with business curtailed, unemployment is widespread; debtors are hard-pressed to accumulate the money needed to pay their debts, many of them going into bankruptcy. Accordingly, society pays a heavy price for its use of fiat money.

C. Paper Money in the United States

(The seven varieties of paper currency; how issued and secured)

A gentleman from Indiana recently stood in a railroad office, purchasing a ticket for Philadelphia. He received in change a handful of bills. While waiting for the train he examined the inscription on these bills. He discovered that he had five different kinds: a gold certificate, three silver certificates, a United States note, a national bank note of a Terre Haute bank, and three Federal reserve notes. He never realized before that there were so many different kinds of bills in circulation. All paper money had looked alike to him. Whereupon the question occurred to his mind: "Are there any others besides these?" At the first opportunity he investigated the matter. He discovered that while the five kinds he had received at the ticket office were quite commonly found in circulation, there were two other kinds authorized but rarely found. The facts regarding each form of paper money he put in a table like that on page 61.

How the seven kinds of paper money are issued and secured. — As previously mentioned, gold certificates simply represent an equivalent amount of gold coin held in the United States Treasury; likewise the silver certificates represent silver dollars. The Treasury notes of 1890 were issued to purchase silver bullion under the Sherman Silver Purchase Act; they are rarely seen in circulation because

NAME	BACKED UP BY	LEGAL TENDER	ISSUED BY
Gold certificate	Dollar for dollar in gold	Full	U. S. government
Silver certificate	Dollar for dollar in silver	Not legal tender	U. S. government
Treasury notes of 1890 (rare)	Dollar for dollar in silver	Full	U. S. government
United States notes	Gold reserve of $150,000,000 against $346,-681,016 in circulation	Full	U. S. government
National bank notes	100 per cent in U. S. bonds plus 5 per cent in gold. Redemption guaranteed by U. S. government	Not legal tender, but receivable for taxes	National banks under government supervision
Federal reserve bank notes (rare)	Same as national bank notes	Same as national bank notes	Federal reserve banks under government supervision
Federal reserve notes	100 per cent in commercial paper and gold; at least 40 per cent in gold. Guaranteed by U. S. government	Same as national bank notes	Federal reserve banks under government supervision

the government is retiring them as fast as they come into the Treasury. The United States notes, issued as fiat money during the Civil War, were brought up to par with gold in 1879 and remain in circulation to-day.

In addition to these four varieties of government-issued paper money, we have certain varieties issued by banks.

Prior to the Civil War all banks were at liberty to issue paper money. At that time the privilege passed into the hands of national banks only, that is, banks chartered and supervised by the national government.[1] In addition to national banks, the twelve Federal reserve banks organized under the Federal Reserve Act of 1913 issue two kinds of paper money. The method of issue of bank notes is as follows:

If a national bank desires to issue notes, the law requires that it must first purchase United States government bonds. Certain issues only of government bonds can be used for this purpose. Having purchased the approved kind of bonds, the bank sends them to the Treasurer at Washington as security for its bank notes. The bonds still remain the property of the bank, even though they are deposited in the Treasury, and the bank receives the interest (usually 2 per cent) which the bonds bear. The next step is for the government to prepare the notes. There must be a separate die made, not only for each bank, but for each different denomination of note for each bank. The United States Government Bureau of Engraving and Printing then prints the notes, equal in amount to the face value of the government bonds deposited as security. The cost of preparing the notes as well as the cost of replacing worn and mutilated notes is charged to the bank. Upon receiving the new bills from the government, they are signed by the president and the cashier of the issuing bank, then passed into circulation. An amount equal to 5 per cent of the notes in circulation must be deposited by the bank as a redemption fund in the Treasury at Washington, to redeem any notes presented there.

[1] The notes of other banks were effectively driven out of circulation by an act of Congress which placed a tax of 10 per cent yearly on such notes. This tax made the issue of notes unprofitable, and caused their rapid withdrawal, leaving the field to the national bank notes. This law is still in force and explains why to-day one never sees notes issued by state banks or trust companies.

Thus the national bank notes are secured dollar for dollar by government bonds plus 5 per cent in the cash redemption fund. In case a bank fails and goes out of business, the government will pay the holders of the notes in full. For that purpose the bonds backing the notes are sold for cash, and the 5 per cent redemption fund may also be used. If the bonds and the 5 per cent fund are not adequate to pay off the notes in full, then under the law the government has a first claim on all the resources of the failed bank to make up the amount needed. When the notes of a failed bank are paid off, they are canceled and destroyed.

The Federal Reserve Act of 1913 added two varieties to the already long list of paper bills. One of these, the Federal reserve bank note, is quite rare; the other, the Federal reserve note, is distinctly the opposite, being the most important form of paper money we have, judged by the number in circulation.

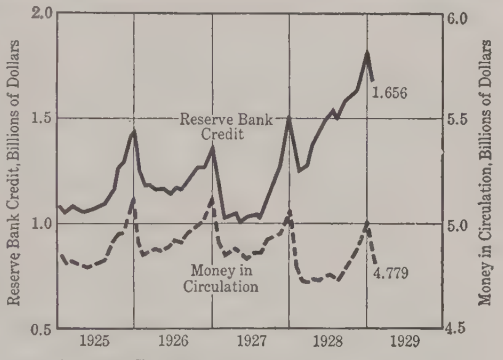
The former of these two, the Federal reserve bank note, was designed to replace the national bank note. The law authorizes the Federal reserve banks to purchase from the national banks the government bonds which now secure the national bank notes. As they do so, the national bank notes must of course disappear. The Federal reserve banks may then, under certain restrictions, issue *their* bank notes secured by these government bonds plus the 5 per cent redemption fund. The Federal reserve bank note is, therefore, issued and secured exactly as the national bank note. Its rarity is explained by the fact that the Federal reserve banks have not exercised, to any great extent, the privilege of buying the government bonds from the national banks.

On the other hand, the Federal reserve note has moved forward within a few years to the front rank and is the one

form of money which gives elasticity to the monetary system (see page 50). An example may make this clear.

Suppose, as usually happens, business is quite active in the fall of the year. Crops are being harvested and sold, goods for winter use are being produced and stocked up in stores, and the Christmas rush is approaching. Burns, a retail merchant, needs $50,000 to purchase his fall and winter goods. Burns goes to the Merchants National Bank and borrows $50,000, giving the banker a promissory note due in three months. The banker, noticing that many of his customers are borrowing and that his cash in the vault is running low, applies to the Federal reserve bank in his district for more cash. To obtain this needed cash the banker sells Burns's promissory note to the reserve bank. Under the law the reserve bank may issue Federal reserve notes and use them in paying the Merchants National Bank for Burns's promissory note. Thus Federal reserve notes come into the possession of the local bank, thence pass into circulation as additional money is needed. The law requires that within the reserve bank adequate security must be laid aside for the reserve notes in circulation. The security must be 100 per cent, of which 40 per cent or more must be gold and the balance approved commercial paper. (Commercial paper means, in general, promissory notes of business firms. Burns's note is an example of commercial paper and could serve as security for Federal reserve notes.) When the autumn rush is over, Burns pays off his loan at the Merchants Bank; this enables the Merchants Bank to pay back the money advanced to it by the reserve bank. The process of paying back the reserve bank brings money back to the reserve bank, thereby taking it out of circulation. Thus through the process of selling Burns's note to the reserve bank when cash was needed by the local bank, the volume

of paper money in circulation was increased; conversely, the volume in circulation was decreased when Burns paid off his loan to the bank, which in turn permitted the bank to pay back what it had received three months earlier from the reserve bank. The actual situation is, of course, that in addition to Burns there are many thousands of other business men borrowing when business is active, thereby causing an expansion in the amount of reserve notes in circulation; and these notes tend to contract in amount when business slows down and borrowers repay their loans.



THE LOWER LINE SHOWS HOW THE AMOUNT OF MONEY IN CIRCULATION VARIES

Practically all of the expansion and contraction is through Federal reserve notes, issued by Federal reserve banks.

In 1929 the government reduced the size of our paper currency to about two-thirds its former size. The change is saving the Treasury about $800,000 a year, chiefly in paper and ink. The new size is also more convenient to carry.

Summary. — Paper money is issued by the government and by banks under government supervision and is intended to circulate as a common medium of exchange. When the issue of such paper money is carefully regulated and redemption in gold provided for, the paper money is as good as gold and much more convenient to handle than gold. It can also be made elastic in amount, to suit the needs of business. Some paper money is backed dollar for dollar in coin, and hence is called *representative* paper money. Other paper

money is backed by a coin reserve, less than dollar for dollar, but sufficient to insure ready redemption — such being known as *fiduciary* paper money. Finally, war usually produces a third kind of paper money — *fiat* money, not redeemable in coin — which causes all manner of trouble, including disappearance of metallic money, rising prices of goods, grave injustice to creditors who are paid back in depreciated money, disturbance to business plans, a spirit of extravagance, and finally an inevitable fall in prices to a gold basis, producing widespread unemployment and bankruptcy. We have seven different kinds of paper money in the United States, four of which are issued by the government and three by banks; three of these seven are examples of representative money, and four are examples of fiduciary money.

By way of summary of *all* the different kinds of money in the United States, the following table is interesting because it shows the relative importance of the different kinds of metallic and paper money:

STATEMENT OF UNITED STATES MONEY, March 31, 1929

Kind of money	*Total stock in the United States*	*Held in U. S. Treasury and in Federal reserve banks*	*In circulation*
Gold coin and bullion	$4,187,884,872	$3,813,629,922	$374,254,950
Silver dollars . . .	539,961,701	496,040,440	43,921,261
Fractional coins . .	423,516,131	29,324,880	394,191,251
Paper money:			
Gold certificates	1,363,796,509	426,549,850	937,246,659
Silver certificates	477,576,081	86,993,408	390,582,673
Treas. notes of 1890	1,289,700		1,289,700
U. S. notes . . .	346,681,016	63,580,709	283,100,307
Fed. res. notes . .	2,051,324,115	377,844,588	1,673,479,527
Fed. res. bank notes	3,882,751	173,865	3,708,886
Nat'l bank notes	698,675,099	52,767,191	645,907,908

QUESTIONS

1. Define or explain:

(*a*) Fiat paper money
(*b*) Representative paper money
(*c*) Fiduciary paper money
(*d*) Elastic paper money

2. Does paper money have any value in itself? If not, where does it get its value? Does a statement printed on a note, "This note is full legal tender" give the note value? Why?

3. Do you suppose the representatives in Congress debating the bill which authorized the "greenbacks" were ignorant of the dire consequences following similar issues of paper money in the past? If not, why did they vote for the bill?

4. How much gold backing has each "greenback" dollar to-day? The public accepts them just as readily as gold certificates. Why does the public do so?

5. If 43 cents in gold serves to keep a United States note at par, would 35 cents in gold do it? Would 25 cents? Would 15 cents? At what point would the gold reserve cease to be adequate? What would happen then?

6. What is meant by an elastic paper money? Why do we need it? Which one of our seven kinds of paper money is elastic? Explain why it is elastic.

7. Paper money is sometimes classified as (*a*) government paper money, and (*b*) bank paper money. List our seven varieties under these two heads.

8. In 1924 Germany's paper money was depreciated 99.9 per cent. In terms of American money this would mean that a paper dollar would be worth one-tenth of a cent in gold. How would you explain such depreciation? What difficulties do you suppose arose in Germany at this time?

9. During the Civil War, "greenbacks" had to be issued in fractional denominations, such as ten cents, because there were no dimes and other fractional coins in circulation. Explain why this situation prevailed.

10. Why does fiat paper money always produce a rise in the prices of goods? What harm or danger is there in a rapid rise of prices? Who may gain and who may lose by such a change in prices?

11. It is said that debtors are benefited and creditors are injured by making depreciated paper money legal tender. Why is this so? Are debtors more entitled to sympathy and help than creditors? Explain whether each of the following is a debtor or a creditor: (*a*) a savings bank depositor, (*b*) the holder of a life insurance policy, (*c*) the owner of a $100 bond, (*d*) a rich capitalist who has borrowed $100,000 from the banks, (*e*) a large cor-

poration which has sold $1,000,000 of its own bonds to the public, (*f*) a farmer with a $20,000 mortgage on his farm, (*g*) the farmer's neighbor who holds the mortgage.

12. "We have seven different varieties of paper money because of historical circumstances. No one really planned, as a whole, the paper money system of the United States." What historical circumstances gave rise to each kind of paper money?

13. At what time of the year is the lowest amount of money in circulation? (See chart on page 65.) Explain why. On what day of the week do you suppose the most money is in circulation? Why? Explain how the amount responds to the need.

14. The chart on page 65 shows about $40 per capita in circulation in the spring of the year and about $43 per capita late in December. What is meant by *per capita?* How can all the cash business of the country be done on such a small amount of money? What governs these amounts?

TOPICS FOR FURTHER STUDY

1. The History of the "Greenbacks":
   Phillips, *Readings in Money and Banking*, chap. V.
   Moulton, *Money and Banking*, pp. 162–174, 178–198.
   White, *Money and Banking*, pp. 106–139.
   Dewey, *Financial History of the United States*, chaps. XII–XV.

2. Some Cases of Irredeemable Paper Money:
   White, *Money and Banking*, pp. 140–149 (Confederate money).
   Moulton, *Money and Banking*, pp. 144–159 (Paper money of France in 1789 and Revolutionary War in U. S.).

3. Should We Approve the Use of Paper Money:
   Moulton, *Money and Banking*, pp. 136–144, 204-209.
   Holdsworth, *Money and Banking*, Revised Edition, chaps. IV and V.
   Moulton, *Financial Organization*, Revised Edition, chap. VI.
   Kinley, *Money*, chaps. XVI and XVII.

CHAPTER V

THE PLACE OF MONEY IN MODERN LIFE

A. What the Gold Standard Does in Modern Life
B. Money as an Organizer
C. Money Makes Possible Our Credit System

In the preceding chapters we saw (*a*) that money originated because of the difficulties connected with barter; (*b*) that the commodity chosen as money renders two very important services to society, namely, it serves to measure or express the worth of all other commodities in terms of itself, thus establishing *prices* on all goods; and second, it serves as a medium of exchange, since persons having goods to sell are willing to sell for money because they know they can exchange the money for whatever goods they desire to buy; (*c*) that from the trial of many different commodities as moneys, silver and gold finally emerged. Then gold became *the* money, while silver, nickel, and copper money became subsidiary, and paper money is now widely used as a substitute for coin; (*d*) that subsidiary metallic coins and paper money have purchasing power equal to gold only so long as they are redeemable in gold, which means the issue of such money must be carefully supervised and restricted by the government.

We may now inquire a little more fully into the meaning of money and into the part it plays in our society.

A. What the Gold Standard Does in Modern Life

(Provides a medium of exchange, a standard for borrowing and lending, and a measure of value)

The gold standard provides a medium of exchange. — Gold itself has been extensively used in the past as a medium of exchange, the actual gold being passed between buyers and sellers of goods. This is seldom done nowadays. In the typical business transaction to-day, substitutes for gold, such as paper money and bank checks, are used. These substitutes for gold money, however, are acceptable to the persons handling them because they are based on the gold standard and are payable in gold. Accordingly, in these transactions gold is, in the last analysis, furnishing the medium of exchange.

As gold money has been diminishing in importance as a visible medium of exchange, it has been increasing in importance as a reserve to back up paper money and such credit instruments as checks, notes, and drafts. Some persons think of the vast amount of gold in the banks and government treasury, amounting in 1929 to about four billion dollars, as idle. They wonder why it is not put into circulation. The answer is that this gold is not idle, but is working all the time, working " by proxy " in the form of paper certificates, paper promises to pay, and checks or paper orders to pay. If the banks did not hold substantial amounts of gold in their reserves, the people would lose confidence in these paper representatives. Gold reserves are, therefore, working even though they seem to be idle.

Money is used in contracting and settling debts. — Another important use of money in modern life is its service in connection with borrowing and lending. While it is possible for a farmer to borrow one hundred bushels of wheat for seed,

promising to pay back one hundred and five bushels in the autumn, still such actual borrowing and repaying in goods is rare. Persons who need to obtain goods in the present and expect to pay for them in the future usually do so in one of two ways: (*a*) they borrow funds and pay cash for the goods in the present, clearing up the transaction in the future by repaying the loan of funds; (*b*) they buy the goods but do not pay for them until some time in the future. The first is a borrowing of money, and the second amounts to a borrowing of goods, money being used in both cases to close the transactions when the time to pay arrives. These transactions involving debts are known as credit transactions. Later in the chapter (Section C) we shall see something of the importance of credit transactions in modern life.

The gold standard gives us a measure of value. — While the gold standard renders important services in providing us a reliable medium of exchange and a basis for arranging debts, its most important contribution to society is that it enables us to measure and express the value of things. When Ames inquires of Burch, "What is Carter worth?" and the reply is "A half million," it is clear that all of Carter's property is being measured and expressed in terms of money, that is, of gold. Thus gold becomes the great evaluator of possessions. When the tax assessors and the census takers have the task of listing and evaluating such miscellaneous items as land, chickens, houses, swine, bonds, and motor cars, they find they must have some common denominator to which these items may be reduced. The dollar in our country is this common denominator. Since the dollar is defined by law as 23.22 grains of pure gold, it is evident that gold money provides for us our common denominator of value.

Not only is the gold dollar used to measure the value of things already possessed, but it is used also to evaluate things

which persons are planning to possess. The housewife, for example, plans what she will do with the money she has to spend. She calculates the amount she will allow for food, for clothing, for furniture, for savings. She decides to buy, let us say, beans rather than asparagus tips, and a new rug rather than a davenport. In making her budget she uses dollars, not as a medium of exchange nor as a standard for borrowing and lending, but as a calculator, an aid in planning, a measure of future values.

This process of reducing everything to a common denominator, the dollar, gives us a price system. We say a suit of clothes is worth forty dollars, a ton of coal, seven dollars. Price is simply value expressed in terms of money. By means of prices we are able not only to evaluate things, but to bargain with one another intelligently, and to carry on our vast system of business operations. Some of the far-reaching consequences of this price system may now be suggested.

B. Money as an Organizer

(Spending guides business managers; the price and profit system apportions resources among industries and within each business)

Spending of money guides business managers. — When the housewife decides to buy a rug rather than a davenport, her decision means that the rug industry will have more business and the davenport industry will have less business than if her decision had been the reverse. If a large number of housewives make similar decisions, the result is that the rug industry flourishes, for the time being at least, while the davenport business declines. If this condition persists for several years, it will encourage the organization of new rug factories and cause old rug factories to be enlarged to take care of the increasing business. At the same time it will cause

davenport makers to reduce their output, discharge some of their employees, and perchance will force some of them out of business entirely. The rug manufacturers will say, " Demand is strong, prices rising, profits good." The davenport producers will say, " Demand is weak, prices declining, no profits." Thus the decisions of buyers largely determine which industries shall make profits and therefore grow, and which industries shall fail to make profits and therefore decline. In other words, business men are in business primarily to make profits; in order to make profits they must sell their goods for more than the goods cost; if the demand for their goods is strong, the selling price is likely to be above cost, and hence yield them a profit; on the other hand, if the demand for their goods is weak, the price is likely to be such as to yield them no profit. Demand is, therefore, of vital importance to the business man, and demand rests upon the decisions of those who have money to spend. Thus, ultimately, plans and decisions regarding the spending of money determine which businesses shall flourish and which shall decay.

This explains how it happens that the things produced are generally the things we want. If we are anxious to buy more rugs, but fewer davenports, our method of informing producers of that fact is by our actions as buyers. If we prefer automobiles to horses and carriages, producers learn of the fact through demand in the market, and adjust production accordingly. This looks very much as if producers were the obedient servants of buyers, and to a great extent that is true; yet not altogether true, for producers have considerable influence over the decisions of buyers. By means of skillful advertising and other methods of appealing to buyers, producers are frequently able to create a demand for their product where none existed before. Probably no one would

contend that the public first thought of and demanded automobiles, and that then producers started experiments leading to the creation of automobiles. The thing worked the other way around. Experiments with motor-driven vehicles were conducted by producers; when successful, the producers got the public to buy the product. The creation of styles illustrates the same thing, the ideas proceeding from producers to consumers. Thus while buyers have the last word because they have the money to spend, still producers have much influence over what the last word shall be. But no matter how or why the buyer reaches a decision, producers must adjust the output accordingly.

Difficulties arise in trying to adjust production to buyers' wants. — In this process of adapting industry to the wants of consumers, not all is gain. There are usually losses, sometimes heavy losses, suffered. For example, when the public practically stopped spending money for horses and carriages, and began spending for automobiles, the results were disastrous to many persons. Expensive plants and equipment for making carriages were no longer needed and had to be either scrapped or altered, with heavy loss to the owners. Dealers in buggies and carriages had vehicles on hand which could be sold only at a loss. Livery stables, blacksmiths, horseshoe-nail factories, harness makers, and many other lines of business were forced either to quit entirely or spend considerable sums changing their businesses to get in line with buyers' wants. In the various enterprises workers were discharged; some of these experienced hardships before they could relocate themselves. We can readily understand why many business men, as well as many laborers, complained bitterly because the public was spending money for automobiles. Any change in the habits and tastes of buyers is certain to create disturbance and loss to some producers.

Furthermore, much of our production is carried on, not after demand is known, but in anticipation of demand. Farmers raise their crops in anticipation of buyers' needs. Railroad trains are scheduled to run without knowing how many passengers there will be. A long list, indeed the great majority, of manufactured products are made up on faith that consumers will eventually take them off the hands of merchants. Even houses are produced nowadays before it is known who will live in them. This system has the great advantage of resulting in things being ready when the consumer wants them. But it has the great disadvantage that producers frequently misjudge the demand, whereby either the wrong thing or too much of the right thing is produced. When a producer misjudges the demand, he may not be able to sell his goods at all, or, more likely, he may sell his goods but only at a loss. In either event he is uncertain what to do next. Shall he continue to produce, or stop? If he continues to produce, he may be inviting disaster, since production was already so great that it had to be sold at a loss. On the other hand, if he stops producing he is sure to lose, since his income will stop, but many of his expenses, such as rent and taxes, will continue. Either choice is fraught with danger, not only to the owner and manager of the enterprise, but also to many other

The Function of Prices

The entire industrial organization is kept in balance by the free play of prices. Prices reflect the relations of the industries to each other, and show where more production is needed in some and less in others. They tend to distribute the workers in the industries as needed.

Prices are not to be quarrelled with or denounced, but respected and obeyed. Always they are telling something that we need to know. The pressure of low prices is a friendly influence, if we take it as such, warning of an unbalanced or uneconomic situation which we need to study. They let us know when competitors are adopting more economical methods; they get us out of ruts, stimulate

classes in society, such as workers employed, and dealers who buy from, and sell to, the enterprise. Under the circumstances, the manager is likely to ask, " What policy will involve the *least* loss?" The answer to this question may lead the farmer to continue to produce, but to raise corn rather than wheat as his main crop. It may lead the mine owner to operate his mine, but only at half of its capacity. It may lead the factory manager to close his plant completely. It may lead the merchant to put on a cut-rate bargain sale. In each case we can imagine the producer complaining because it is so hard to anticipate correctly the kind and amount of goods that consumers will buy at a profitable price.

Buyers also determine the success or failure of competitors. — We have just seen how the decisions of buyers determine which industries shall flourish and which shall fail. The same authority determines which firms in an industry shall flourish and which firms shall fail. Why does one automobile concern grow so much faster than another? Or why are certain stores so popular and successful, while others are less so and some fail utterly? Why do certain lawyers have more cases offered them than they can accept, while other lawyers must sell real estate for a living? Obviously the successful have learned how to attract buyers, and thus make profits. It may be through advertising, it may be through persuasive salesmanship; there may be popularity based on the fact that " others are going there " or that the particular product is superior in quality. Whatever the reason may be, it comes down at last to one thing, namely, that people keep spending their money with certain firms and these firms profit by their spending. Conversely the failing business is the business that fails to hold its customers. Occasionally, it is true, a business fails even though it has a large patronage. Poor management can wreck even a popular firm. But other

things being equal, the successful competitor is the one who makes profits by holding and gaining customers, while the failure is the one who suffers losses through not gaining and holding customers. *Where* individuals spend their money, that is, with which firms they spend it, usually determines the success or failure of competing firms. Those with money to spend hold the whip hand over those who are striving to gain business success. The business man seeking profits learns that he must win the favor of buyers.

The internal organization of a business is guided by profits. — Another way in which money acts as an organizer is in the operation of a business. This may be made clear by an example. Jones had inherited $30,000. Over a period of some eight years interest had accumulated on this inheritance to the amount of about $20,000. In addition, Jones had saved out of his salary about $10,000, so that he had approximately $60,000 of capital. He decided to go into business for himself. But he was uncertain what business to enter. He struck from his list quite a number of possibilities, some of them because he was sure he did not possess the personal qualifications demanded by the business, and others because he found they were declining in importance. He did not wish to risk his capital and his effort in an enterprise that was no longer in favor with the public. His choice finally lay between two alternatives, that of becoming a building contractor, or of starting a job printing concern. The decision was not easy. He desired to enter the one that would yield him the larger profit, but it was next to impossible to estimate the profit he might expect from either business. He could not foretell accurately how much business he might get nor how much it would cost him to turn out the business he did get. But he could make certain calculations. Practically all his calculations were designed to throw light on

the matter of profits and were made in terms of money. Cement, lumber, bricks, excavations, printer's ink, presses, engravings, laborers' services, and dozens of other items were all reduced to one common denominator — the dollar. Comparisons were made; conferences were held with men experienced in the two lines of business and with the banker from whom he expected to borrow money. Finally he rented an office and had painted on the window: *Building Contractor.*

When Jones came to organize his contracting business he found that he was continually using money calculations. Before he could submit a bid for a job he had to figure carefully the cost of all the items entering into the work. Much of the time his desk was covered with price quotation sheets. Among other things, he had to figure whether it was cheaper to excavate by using a steam shovel and a few men, or by using many men working without machinery. The steam shovel would require a large initial investment and would wear out rather rapidly, but would save both time and wages. When the prevailing wage rate for unskilled labor was low, he found it cheaper to use human muscle rather than machines. When wages were high, the machine method was cheaper, and although Jones disliked to turn his laborers off, he felt that he must use the cheaper method. Thus, costs computed in terms of dollars were decisive.

As his business grew, Jones found it necessary to expand his office facilities to take care of the increasing number of records as well as to keep accurate accounts. To these accounts he was referring continuously to see whether he was making profits or suffering losses. All these accounts were of course kept in terms of dollars. When the books told Jones he was making profits, Jones had to decide what should be done with the profits. Should they be withdrawn in cash

and spent by Jones and his family, or should they be retained to enlarge and strengthen the business, or should part be withdrawn and part retained? When the books told Jones he was losing on a particular job, he tried to discover why he was losing, and how the losses could be stopped. All these problems had to be worked out in terms of money.

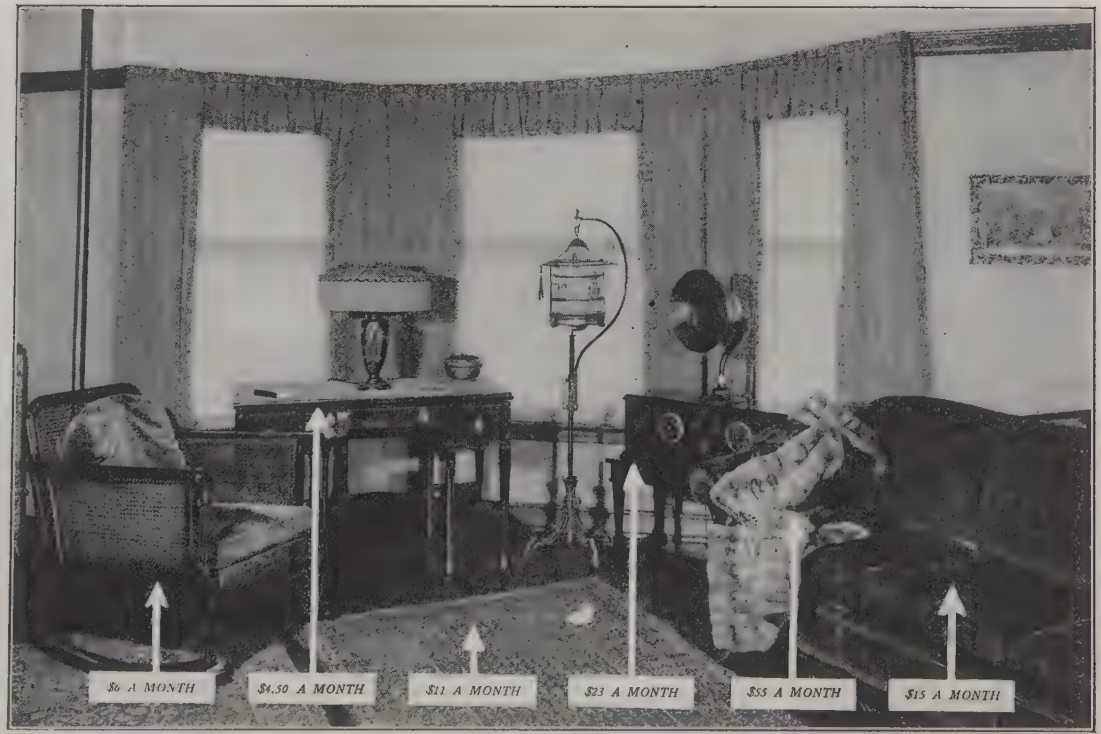
Thus Jones found that money as a measure of value was indispensable to him, both in helping him decide what business to enter and in helping him organize and run the business he did enter. So it is with all business men to-day. In the attempt to make profits, money calculations are being employed continuously. Buildings are erected, others torn down; new machinery is installed, other machinery is scrapped; workmen are hired and discharged; the use of certain land is shifted from raising cotton to raising corn; these and a multitude of other business decisions are being rendered by applying the test of profits; and profits are figured in money. Money, as measure of value, enables the profit system to work.

C. Money Makes Possible Our Credit System

(How credit transactions work; services rendered by credit to industry and to savers)

Another way in which money aids us is by serving as the basis of our credit system. Credit is the obtaining of something in the present, payment to be made later. A vast amount of goods and services to-day is bought on credit, so much indeed that we are often said to be living in a credit society.

How a credit transaction works. — "A dollar down and a dollar a week!" How many things have been bought on such alluring terms! Payment in instalments is permitting



Courtesy of "The Magazine of Business" (A. W. Shaw Co.)

CREDIT FURNISHES THE HOME

Instalment payments on these articles absorbed $114.50 out of the man's income of $250 per month.

families to buy their own homes, to fill them with furniture, to equip them with electric washing machines and cleaners, to be entertained with their own radios, phonographs, or pianos, and to ride in their own cars. The instalment plan is placing machines in offices and factories, cash registers in stores, plows and tractors on farms, locomotives on railroads, fur coats and jewelry on individuals. Instalment buying has recently developed into a vast business, employing many individuals, with specialized firms handling the financial details.

Some credit transactions involve one payment rather than payment in instalments. For example, the housewife " runs a bill " at the store, paying in full at the end of the month; the storekeeper himself may buy his goods on sixty-days' time, that is, payment to be made sixty days after the goods are purchased. Whether payment shall be made in instalments or all at one time is a matter to be agreed upon by the parties concerned. In either event money is the basis of the transaction. The value of the goods transferred is calculated in money; the charges on the books of the interested parties are made in money; final settlement is accomplished with money.

Is credit a blessing or a curse? — From time to time we hear persons expressing the thought that such credit buying is a bad thing for society. " Pay cash for everything," and " Never get into debt, ' we are advised by some who think they know. Others, equally sincere, say, " If you need it and can't pay cash, get it on credit." May there be circumstances in which the one kind of advice is good and other circumstances in which the opposite advice should be followed?

We may consider the question first, from the standpoint of the buyer. Is a person justified in buying things he can-

not pay for at the time he buys them? This depends on circumstances. Probably every one would agree that a farmer who is short of money in the summer and is raising crops to be sold in the autumn would be justified in buying provisions on credit during the summer. Likewise, a drayman, who knows that a motor truck would earn for him enough to pay for itself in a short time, would be justified in buying the truck even though he cannot pay for it in advance. On the other hand, if the drayman owes money, not only for his truck, but for groceries, clothes, and furniture, probably every one would agree that he should not go further into debt to buy diamonds for his wife and daughters. Certain cases therefore seem to justify clearly the use of credit by buyers, while other cases do not. In general, it may be concluded that when the purchase promises to increase greatly one's efficiency or to yield more satisfactions than the payments cost in sacrifices, the purchase is justified.

Second, we may look at the question from the standpoint of the seller. Here also we find clear cases on both sides, and many doubtful ones between. Take, for example, the dealer in automobiles selling on credit. The dealer's chief concern is: "Will the buyer pay if I trust him?" If the buyer does not pay, it may mean serious loss to the dealer, whether the dealer recovers the car or not. Even though the dealer recovers the car, he may still lose, owing to the fact that the secondhand car may be worth little. If the dealer is sure the buyer will pay, it is a clear case of "go ahead." If the dealer is sure the buyer won't pay, it is a clear case of "don't sell." If the dealer is doubtful, he must investigate and use his judgment. Some of the factors investigated are shown in the accompanying poster.

Credit is, therefore, like fire, electricity, and many other forces in the world. It may be helpful or it may be harm-

ful, depending on how it is used. When it is used, that is, when the seller does trust the buyer, the buyer should, if possible, live up to his agreement. By meeting his obligations promptly, he does two things. First, he establishes his own reputation as a trustworthy man, thereby making others willing to trust him; and second, he helps make it possible for

BASES OF CREDIT

ABILITY TO PAY (*Capacity*)	WILLINGNESS TO PAY (*Character*)
1. Capital of Debtor	1. Personal Habits
2. Income of Debtor	2. Reputation in the Community
3. Nature and Location of his Business	3. Record for Honest Dealing
4. Character of Competition	4. Style of Family Living
5. Insurance Carried	

the seller to meet his obligations, since dealers cannot pay their bills unless their customers first pay them. The smooth working of our credit system depends on each person's living up to his promises. If those owing Jones do not pay, then Jones cannot pay those whom he owes, and so on. Business men are dependent on buyers, not only for the patronage essential to success, but also for prompt payment which is likewise essential to success.

Industry, especially large-scale industry, is dependent on credit. — One aspect of modern life reveals clearly the im-

portance of credit. Practically every large business firm uses credit in one form or another, and probably could not exist without it. An illustration may make this clear.

A few years ago a southern business man by the name of Richards observed how popular rayon goods (artificial silk) were becoming. Investigation showed rapidly increasing sales all over the country, that rayon was displacing both natural silk and cotton for many purposes, that the existing rayon mills had orders that would keep them busy for months, and that the profits of well-managed mills were large. Richards decided to organize a company to manufacture and sell rayon products.

Engineers and other experts worked out plans. They discovered that the cheapest way to make rayon products was to make them in great quantities, with the aid of expensive and ingenious machines; in other words to make them on a large scale. They estimated that it would require $1,800,000 to set up and operate the mills. Since Richards did not have any such sum of money on hand, credit had to be used.

First of all, other persons were induced to invest their money in the enterprise. Since the business gave promise of yielding large profits it was not difficult to get investors to turn over their savings to the company. The investment was in the nature of a credit transaction, money being transferred in the present, repayment to be made at some future time.

Second, during the process of building and equipping the mills, much of the material and machinery was bought on credit.

Third, the operation of the mills involved purchases on credit of various materials entering into the products. Occasionally credit at banks had to be used to provide money for running expenses. Even those working for the company found they were extending credit to their employer, since they

were not paid until days and in some cases weeks after their services had been rendered.

Finally, the company found that in order to dispose of its products successfully, it had to do what others were doing, namely, sell on credit to its customers. Thus, from the origin of the company on throughout its career, credit was being used continuously. It proved indispensable to the rayon manufacturer.

Such is the case with nearly all industries to-day, especially large-scale industries. To "swing" a large enterprise requires the bringing together of vast sums of capital, and also causes much buying and selling with payment to be made later. Credit is the means whereby these results are accomplished.

Surplus wealth is shifted by means of credit. — When Richards organized his rayon company, he knew it was no use to ask persons to invest who had nothing to invest. So he directed his attention to those who had a surplus of wealth, that is, to those who were not using all the funds they possessed. This did not mean that only wealthy persons were asked. Some with modest incomes joined his enterprise.

Not only did Richards find investors among all classes in his community, but he found them in many other communities as well. Attracted by the hope of profits, people sent money from all directions; it came as streams flowing down a dozen valleys to empty into a common lake. The owners of these surpluses were as glad to find a promising investment for their money as Richards was to get their money. Investors desired to find an outlet for their money; Richards had a profitable use for their money. Credit transactions resulted. The money was transferred, repayment to be made later.

Thus by means of our system of credit, savings are put to work. Those who have more money than they choose to

spend find credit a necessary aid in disposing of their savings. Some do not care to invest in a rayon factory, but prefer real estate or perhaps an oil company. Some do not want to decide where their money shall ultimately go, hence they just deposit it in the bank, thus allowing the banker to decide where it shall ultimately go. A few distrust all methods of putting savings to work and proceed to keep their savings hidden away. Those who hoard their savings are, however, the exception.

The great majority of savers (and the number of savers runs into the millions in the United States) want to put their savings to work. To assist them in putting their savings to work we have in modern society a great array of institutions, plans, and instruments. The remainder of our study is concerned largely with these institutions and instruments. But we must not lose sight of the fact that, after all, the big thing we are examining is our financial system, the system by which savings are put to work. Or, stating it differently, the system by which industry acquires and uses the savings of society. These savings, as we have noticed, usually take the form of money. The credit system, which serves, not only investors and borrowers, but also sellers and buyers, is based throughout on money. In examining further our financial system, we shall be introduced in Part II to some of the important financial problems of business concerns. Part III will discuss the principal instruments used, the papers that are made out when funds are shifted. In Part IV we shall investigate the work of the more important institutions that handle money, shifting savings into the hands of those who will put them to work. Finally, in Part V, we shall consider some of the criticisms made of the system.

Summary. — Our money system, based on gold, gives us not only a medium of exchange, but a measure of value and a

basis for our credit system. Dependent on money as measure of value, we have both our price system and our profit system. Seeking to make profits, our business organizers move labor and capital into the lines of industry for whose products there is the greatest public demand. In this way, industry is adjusted to the wants of those who have money to spend. Changes in demand on the part of the public usually cause considerable loss to producers, since labor and capital cannot be adjusted quickly to new conditions. The quest for profits also leads business men to organize their businesses internally on the most economical basis.

Credit transactions, by which funds or goods are transferred in the present, repayment to be made later, have become an essential feature of our society. Through the credit system instalment buying is carried on and industry obtains needed capital, supplies, and services, while savers are given an opportunity to put their surplus funds to work.

QUESTIONS

1. "The gold standard makes possible our price system." Explain.
2. If gold were not coined, could it still be our measure of value? Could our paper money still be redeemed in gold? Explain.
3. Which one of the following uses of the gold standard do you regard as the most important: (*a*) measure of value; (*b*) basis for contracting and settling debts; (*c*) medium of exchange? Give reasons for your answer.
4. Which of the three foregoing uses of money is being rendered in each of the following cases: (*a*) A offers to sell his automobile to B for five hundred dollars; (*b*) B accepts and gives A his note for $500, payable in sixty days; (*c*) At the maturity of the note B gives A a check for $500; (*d*) A cashes the check and takes the money, together with $500 more cash, to a dealer and buys a new car with the $1,000.
5. How can it be said that the gold standard provides us with a medium of exchange when practically no gold is being used in daily transactions?
6. "We live not in a money age but in a credit age." Is this true? Could we have the credit age without money? What does money do in the credit age?

7. "We do what pays best." Is this always true of the mother in the home? Of the student in school? Of the members of an athletic team? Is it always true of business men? Is it usually true of business men?

8. When a laboring man has a choice of several different jobs, what factors does he consider in making his decision?

When a capitalist has a choice of several different investments, what factors does he consider in making his decision?

How do the decisions of the laborer and capitalist result in shifting labor and capital from unprofitable into profitable lines of industry?

9. Why does farmer Brown raise tobacco rather than cotton? Why do Florida and California raise fruit? Why are so many automobiles made in Michigan? Why does your home community produce what it does? How do these things prove that we live in a profit-seeking society?

10. Why do not farmers stop farming the instant they discover that farming is not profitable? Why can't a farmer go on farming indefinitely even though it is unprofitable? Why does a man leave the farm and go to the city?

11. Explain how the producers of radio supplies were led to enter that business. Is it probable that most of them were working in some other lines before they "went into radio"? What happened to these other lines when the radio men abandoned them?

12. If the "radio bug" causes hundreds of thousands of persons to spend money for radio equipment rather than for phonographs and player-pianos, what difference does it make to the workers employed in phonograph and piano factories? Trace step by step the effects from the retail stores to the factories.

13. "Supply of, and demand for, calico goods are out of line. The goods are made up and priced, but merchants are reluctant to buy because consumer demand is poor." Why were the goods made up before the demand was known? Show what effect this situation is likely to have on the calico industry. Mention several reasons which might explain why consumer demand for calico is poor.

14. Why is so much money spent in modern advertising?

15. Why was not society among the American Indians a "credit society"?

16. "The food we eat and the clothes we wear are possible because of credit." Explain.

17. Debate this issue: Resolved — that instalment buying does more harm than good.

18. Why do some persons hoard their savings? Show why hoarding hampers industry.

19 "The credit system and the profit system work together." Give several illustrations of this fact.

TOPICS FOR FURTHER STUDY

1. What the Gold Standard Means:

   Kinley, *Money*, chaps. I, V, XIII.
   Holdsworth, *Money and Banking*, chap. II.
   Moulton, *Money and Banking*, pp. 5–13.
   Foster and Catchings, *Money*, chaps. IV, VI, VII, VIII.

2. Prices and Profits as Guides to Business:

   Moulton, *Financial Organization*, Revised Edition, chaps. I, III.
   Foster and Catchings, *Money*, chaps. XI, XII.
   Marshall, *Readings in Industrial Society*, pp. 280–303.

3. Credit and Its Uses:

   Moulton, *Financial Organization*, chap. VII.
   Phillips, *Readings in Money and Banking*, chap. X.
   Holdsworth, *Money and Banking*, Fifth Edition, chap. VIII.
   Scott, *Money and Banking*, Sixth Edition, chap. VII.
   Magee, *Money and Credit*, chaps. VI, VII.

PART II

THE FINANCIAL POLICIES OF A BUSINESS

PURPOSES OF PART II

1. To indicate some of the important financial policies that must be worked out by a business
2. To suggest some principles used in working out financial policies
3. To show the relationship between the financial executive and financial policies

CHAPTER HEADINGS OF PART II

CHAPTER VI. Funds and Their Uses in a Business
CHAPTER VII. Administering the Income of a Business
CHAPTER VIII. The Financial Executive and His Work

Just after the World War, a young man entered the employ of a large western oil company. His title was assistant treasurer. He was ambitious, frequently worked at his desk after hours, was a close observer of what went on around him, and within a few years became one of the most valuable men in the office. The treasurer gradually came to turn over to him more and more of the responsible and perplexing tasks.

In 1921 came a serious crisis for all oil companies. Overproduction and low prices of oil were not only shattering all hopes of profit, but were threatening the very existence of many companies. For this particular company the outlook was dark. For weeks the officers and directors wrestled with the problem. During these troublesome days the treasurer was frequently seen in conference with his young assistant.

One day the treasurer and his assistant walked into a directors' meeting where " the gloom was so thick you could cut it," as one of them later expressed it. The younger financier laid before the directors a plan that for sheer daring made the older men gasp. It involved nothing less than raising millions of dollars, taking advantage of the crisis in the industry, buying up supplies of oil that were a drug on the market, and storing the product until prosperous times returned. As the young man pictured the world becoming increasingly dependent on oil, the certainty that oil would be much higher in price in a year or two, and the present bargains to be had, the directors began to absorb his optimism. When he laid before them his plan of raising the money, explained his carefully devised budgets, his method of handling the money, and of administering the income to be derived, they were convinced. They not only voted the plan through, but elevated the daring young man to a place on the committee which was appointed to carry out the plan.

Two years later the company published a statement of profits that astonished the financial world while the young man was signing himself " Treasurer of the Company."

CHAPTER VI

FUNDS AND THEIR USES IN A BUSINESS

A. Determining the Amount of Funds Needed
B. Keeping Account of the Funds Used

Money is an effective worker, both for society and for an individual business firm. For society it provides, as we have seen, a system of prices, profits, and credit, all of which combine to keep industry adjusted to the wants of the people and to make it possible for industry to use the surplus wealth of individuals for its development. We must now examine the rôle played by money within a particular business enterprise.

In the preceding chapter we saw in the illustration of Jones entering the contracting business and Richards launching a rayon mill how important money and money calculations are in business. We are now to inquire more specifically into the financial problems of a business and into the policies employed by managers in working out their financial problems. We begin with the problem of determining the amount of funds needed to start a business and to operate one after it is started.

A. Determining the Amount of Funds Needed

(Amount needed to start the business; to operate the business; to readjust the scale of the business from time to time)

When we inquire regarding the amount of funds a business needs, we are led to ask, "What are funds needed for?" This breaks up into three questions:

1. What amount of funds is needed to start the business?

2. What amount is needed to provide for the day-to-day operations of the business?

3. What amount is needed periodically to readjust the general scale of the business to new conditions?

In order to work out answers to these three questions we may analyze a typical case. Several years ago two brothers developed a machine which, upon the deposit of one cent, would deliver sufficient ink to fill a fountain pen. They decided to apply for a patent on the "Fountain Pen Filling Station" and to organize a company to make and sell the machines. Their estimates were as follows:

I. *The amount of funds needed to start the business:* —		
1. *Preliminary work.* — Patent attorney's fees; investigation regarding the best method of making and marketing the machine		$200
2. *Organization expense.* — Obtaining a charter from the state for the new corporation; books to record minutes of directors' meetings, finances, and issues of stock; selling the stock (the officers of the company agreed to do this as part of their work, without extra compensation, hence only traveling expenses needed to be counted)		140
3. *Tangible property.* —		
(*a*) Dies to make metal parts	$4,000	
(*b*) Moulds for rubber parts	600	
(*c*) Finished parts sufficient to assemble 500 machines	2,500	
Total for this item		7,100
4. *Expense for intangibles.* —		
(*a*) Advertising campaign	18,000	
(*b*) Running expenses for the first year in excess of receipts — consisting of salaries, postage, rent, traveling expense, wages for assembling machines, etc.	7,000	
Total for this item		25,000
Total funds needed to start the business		$32,440

The stock sold brought in about $26,000. It was therefore necessary to cut down the expenditures for advertising to about $12,000. The period of time estimated to "start the business" was one year, since the organizers thought that by the end of one year the income from sales would take care of the expenses and leave some profit. The first year was largely spent in experiments, "feeling their way" forward. A machine was perfected, omitting the slot for the penny, designed to be sold to offices, hotels, and other places where it was customary to furnish ink free. Several methods of selling were tried in order to discover the best way to reach high schools, colleges, and libraries, where the need for the machine appeared to be the greatest. One of the brothers was elected president of the company and the other, secretary-treasurer. These were the only full-time employees of the company. Assistance was hired by the hour for assembling machines, mailing, and stenographic work, while all selling was done by mail, except for a few weeks of trial selling by salesmen. A room was rented, the front being used as an office, the rear as an assembly shop.

II. *The amount of funds needed to provide for the day-to-day operations.* — By the end of the first year the starting period was over. From then on it was a question of *operating* the company. Experience plus guesswork gave the following estimates:

Funds needed

January to April: Fairly good period for sales; cash was needed to pay wages, salaries, rent, parts for machines, postage, and a few minor items.

Estimated receipts	$650 per month
Estimated running expenditures	575 per month
Excess cash receipts	75 per month
For 4 months	$300

May to August: Dull period for sales.

Estimated receipts	400 per month
Estimated expenditures	525 per month
Excess expenditures	125 per month
Deficit cash for 4 months	$500

September to December: Best period, especially for sales to schools.

Estimated receipts	$900 per month
Estimated expenditures	725 per month
Excess cash receipts	175 per month
Excess cash for 4 months	$700

The officers saw that they would be $200 short of cash in the summer period. They planned to borrow $300 so as to be on the safe side, with the expectation of paying off the loan from the autumn surplus.

Thus the amount of funds needed to start this business [illegible] had been permanently invested by the end of the first year. The amount needed for day-to-day operations varied from $525 to $725 per month, requiring the use of credit part of the year.

In three years the business had developed until it was at "the parting of the ways." Those in charge of the company had to decide whether to continue to run along in the old way, or launch forth on an aggressive policy of expansion, with a view to making larger profits.

III. *What amount of funds is needed to readjust the business to new conditions?* —

The officers estimated that a policy of expansion would call for the following amount of funds to be used within one year:

1. To provide for increased sales: Increased advertising, commissions and traveling expenses for salesmen, opening of branch offices in 6 districts of the country, etc. . . .	$30,000
2. To provide for increased manufacturing: Construction or purchase of a building where parts could be made and assembled, equipment for the building, and a light truck	45,000
3. To provide for increased office facilities: Books, files, safe, furniture, and fixtures, etc.	6,000
Total	$81,000

The $81,000 needed was raised by the sale of additional stock. The company was then in position to carry out its program of expansion.

Such was the life history of one concern during its first six years of existence. Other businesses go through much the same general life history, except that the details are different and the periodical crises and readjustments mean, for many concerns, collapse and failure. But with all businesses some funds are needed to start the enterprise, and these funds are thought of as more or less permanently committed to the enterprise; in addition, some funds are needed from time to time to meet various running expenses; and finally, infre-

quently (perhaps every two years, perhaps every twenty years, varying with different businesses) a readjustment of permanently committed funds occurs. This readjustment is sometimes an expansion, as in the case analyzed, and sometimes it is a contraction of operations and of funds. As new enterprises start and old ones fail, and as existing enterprises expand and contract, society's funds respond, flowing into and out of the various industries and the various firms.

What becomes of the funds? — As the foregoing case illustrates, funds are wanted, not for their own sake, but for the sake of what they will buy. The organizers of the company needed paid help, parts for the machines, advertising space in periodicals, postage stamps, office space, and other essentials for carrying on their work. Accordingly, the funds were spent about as fast as they came in, except for a cash balance of a few hundred dollars kept in the bank. Money was useful, as a medium of exchange, to bring to the company the goods and services needed by the business.

Similarly, after the business was running there was never very much cash on hand, even though money was coming in all the time. It went out about as fast as it came in. As machines were sold, money flowed in; as expenses of running the business fell due, money flowed out. Of course the two did not run together exactly; as we have seen, the expenditures ran heavier than the receipts at certain times, while the reverse was true at other times. But in the long run receipts took care of expenditures, and were desired mainly in order to make expenditures.

So it is with business enterprises in general. They are organized to make profits. In order to make profits, they need goods and services. To obtain these goods and services, money is useful, nay, even necessary. But it is

not the money as such that makes the profits, but rather the goods and services. Money is sought for the sake of what can be obtained with it. It is received only to be passed on.

Having seen how a business determines the amount of funds it needs, and what becomes of the funds obtained by the business, we may turn next to the problem of keeping account of the funds used. It is a matter of vital concern to a business to know whether or not profits are being made. This can be determined only by keeping accounts.

B. Keeping Account of the Funds Used

(The income statement and the balance sheet)

Some persons, in trying to keep track of their funds, rely on memory. This method may work fairly well when there are few funds to be handled. But whenever funds are an important feature of a business, or whenever it is essential to know how much profit or loss is being made, written accounts are necessary.

In a small business a few simple records and books are often sufficient; these may be kept by one person giving a part of his time to the task. In a large business the records and books are numerous and complex. To keep these books may require all of the time of hundreds or even thousands of employees. But however simple or complex, the records are expected to answer three all-important questions about the business:

1. How much have we made or lost, and how have we made or lost it?
2. What do we own?
3. What do we owe?

We shall consider briefly these three questions.

I. *Accounts showing how much has been made or lost, and how.* — When analyzing the profit question we are interested in: (*a*) income and (*b*) expenses. Income is what comes into a business in the course of its operations, whether in cash, or in promises to pay cash, or in something else. Expenses are what go out of a business in the course of its operations, whether in cash, or in promises to pay cash, or in wearing out of buildings, or in something else. It is *values* flowing *in* and *values* flowing *out* that determine profits or losses. The books record these values flowing in and out. Periodically these records are summarized in what is known as an "Income Statement" or "Statement of Profit and Loss."

The income statement for the Fountain Pen Filling Station Company appeared as follows:

Income Statement for the Year

Sales for the year		$31,000
Deduct cost of goods sold:		
Goods on hand Jan. 1	$2,000	
Goods purchased during year	14,000	
Total goods handled	$16,000	
Less goods on hand Dec. 31	3,000	
Goods sold, reckoned at cost price		13,000
Gross profit		$18,000
Less operating expenses:		
Wages and salaries	$7,000	
Repairs and depreciation	800	
Taxes	200	
Rent	1,160	
Advertising	5,100	
Bad debts	200	
Miscellaneous	240	
Total		$14,700
Net profit for year		$3,300

II. *Accounts showing what is owned.* — The second question we are interested in is: "What belongs to the business?" The property belonging to the business may be:

(*a*) Tangible, physical things, such as cash, merchandise, land, and machinery;

(*b*) claims against others, such as claims for goods sold and not yet paid for; and

(*c*) intangible values, such as goodwill, rights to use streets or alleys for wires and poles, patents, and trademarks.

The books and records show what these various items cost and how much they have fallen or risen in value — in other words, what they are worth at present. Most business men, instead of calling these items "property," call them "assets" or "resources" when financial statements are prepared.

The statement of the assets of the Fountain Pen Filling Station Company appeared as follows:

Assets

Cash	$1,500
Accounts receivable	4,600
Notes receivable	1,400
Merchandise	3,000
Furniture and fixtures	400
Machinery and equipment	3,600
Patents and goodwill	21,000
Total	$35,500

III. *Accounts showing what is owed.* — There are two parties who have claims against the business, hence the business may be thought of as owing these two parties. We therefore want to know:

(*a*) What is owed to *outsiders*, that is, to those who are not owners of the business; and

(*b*) what is owed to *insiders*, that is, the owners.

(*a*) What is owing to outsiders? The amount owed to outsiders is the real debt of the business. This debt is typically incurred by buying goods on credit or by borrowing funds. The outsiders, who sell materials on credit or lend funds, hold claims against the business and are called creditors, while the business is in debt, or is the debtor. The claims of creditors must be paid when due or the creditors may throw the business into bankruptcy. Furthermore, if the owners decide to dissolve the business, the claims of creditors (whether due or not) rank ahead of all claims of the insiders or owners.

The books and records reveal what is owed to creditors, and these are summarized under the heading "Liabilities." The liabilities of the Fountain Pen Filling Station Company were:

	Liabilities
Accounts payable	$3,200
Notes payable	1,400
Wages unpaid	700
Total	$5,300

(*b*) What is owing to the insiders? The business may be regarded as owing the insiders, or owners, everything over and above the claims of the outsiders, or creditors. There are two differences between the claims of outsiders and insiders:

(1) Outsiders' claims always come first, while owner's claims come last; thus the risks taken by owners are greater than those taken by outsiders.

(2) Outsiders' claims are for a definite sum, while owner's claims are for a more or less indefinite sum, since owners take everything that remains after the outsiders or creditors are paid. Owners are sometimes called "residual claimants" to signify the nature of their claims.

Since the owners are the chief risk takers and get everything over and above the claims of the creditors, there is good reason for keeping the books and records so as to show separately these two amounts. What is owed to outsiders is called, as we saw above, *debt* or *liabilities;* what is owed to insiders is called *ownership* or *proprietorship* or *net worth* — that is, the worth free from further *outside* charges.

The amount owed to the insiders consists chiefly of two items: (1) the stock, or sum originally invested by the insiders, and (2) the profits made in the past and left in the business. The former is generally labeled "Capital" or "Capital Stock," while the latter is generally labeled "Surplus."

The statement of ownership, or net worth, of the Fountain Pen Filling Station Company follows:

Ownership or Net Worth

Capital stock	$26,000
Surplus	4,200
Total	$30,200

The balance sheet. — When we gather together a statement of what we own (assets), and of what we owe outsiders (liabilities), and of what we owe the owners (ownership), the result is a balance sheet: It balances because what we own must equal what we owe (including in what we owe, the amount owed to the owners of the business). It is customary in this country, in such a statement of account, to place the *assets* on the left side and the *liabilities* and *ownership* on the right side.

Gathering together the figures used in our examples above, that is, the assets from page 100, the liabilities from page 101, and the net worth from page 102, we have:

BALANCE SHEET OF THE FOUNTAIN PEN FILLING STATION COMPANY

Assets		*Liabilities and Ownership*	
Cash	$1,500	Accounts payable	$3,200
Accounts receivable	4,600	Notes payable	1,400
Notes receivable	1,400	Wages unpaid	700
Merchandise	3,000		
Furniture and fixtures	400	Capital stock	26,000
Machinery and equipment	3,600	Surplus	4,200
Patents and goodwill	21,000		
Total	$35,500	Total	$35,500

The line between "Wages unpaid" and "Capital stock" shows where the division occurs between what is owed to outsiders (liabilities) and what is owed to insiders (ownership).

Both the balance sheet just discussed and the income statement discussed on page 99 are widely used in the business world to-day. The income statement is the moving picture of operations during a period of time, showing how the profits or losses were made. The balance sheet is the snapshot of the financial status of the business, showing its condition at a given moment of time. The two statements supplement each other and reveal valuable information, especially to the creditors and to the owners of the business.

In the next chapter we shall see what a business does with its income.

QUESTIONS

1. Define or explain:

(*a*) Balance sheet (*c*) Ownership
(*b*) Assets (*d*) Liabilities
(*e*) Income statement

2. (*a*) Why does the New York Central Railroad Company need funds?
(*b*) How does this company determine the amount of funds it needs?
(*c*) Why are some of these funds raised from the owners or stockholders and some from creditors?

3. A young man in Emporia, Kansas, 18 years of age in 1928, decided to give up his position as clerk in one of the leading grocery stores and go into the grocery business for himself. He had saved $700, which was in a savings account in a local bank.

(*a*) What are the principal items he would have to consider in deciding how much money he would need before opening his store?

(*b*) What items would he have to consider in planning his funds for daily operations?

(*c*) Is it probable that the funds provided at the beginning in 1928 would be about what he needed in 1934, assuming he remained in business so long? What are some of the major changes in funds that would be likely to occur during the six years?

4. A number of breweries that were put out of business by the prohibition law were converted into ice-manufacturing plants Many of these discovered that they needed less funds to carry on the ice business than they needed before. What would happen in this case: (*a*) to creditors? (*b*) to owners? (*c*) to the assets of the business?

5. A new cotton-manufacturing company was recently organized in a southern city. The organizers estimated they would need $600,000 to build and equip the mill. Shares of stock were sold to raise this sum, and the cash received, amounting to $600,000, was deposited in the bank. A year later the company's cash in the bank had dwindled to $25,000, yet the company's officers said, "The business is getting along fine."

(*a*) How could the business be "getting along fine" when it had so much less money than a year earlier? What did the officers mean by "getting along fine"?

(*b*) What became of the $575,000?

(*c*) Make out a balance sheet of the company as you think it appeared just after the stock had been sold and while the $600,000 was in the bank. Then indicate some of the changes that would have appeared in the balance sheet a year later.

6. If you desired to know how much profit a firm was making, would you ask to see their balance sheet or their income statement? Which would you ask for if you wanted to know how much the firm was in debt? If you wanted to know the value of their machinery? If you wanted to know how much their sales amounted to?

7. Bankers try to lend money only to firms that will be sure to repay the loan. To throw light on this question of ability to repay the loan, a banker commonly requires applicants for loans to submit their income statement and balance sheet to him. Why is this done?

8. Assuming that the treasurer of the Fountain Pen Filling Station Company had full charge of all financial matters, what do you think would be the chief problems he would be studying if you were to step into his office?

TOPICS FOR FURTHER STUDY

1. Planning the Use of Funds:

   Lincoln, *Applied Business Finance*, chaps. III, IX.
   Dewing, *Financial Policy of Corporations*, Rev. Edition, Book II, chaps. I, II, IV–VII.
   Mead and Scholz, *Rudiments of Business Finance*, chap. IV.
   McKinsey and Meech, *Controlling the Finances of a Business*, chaps. XIII, XXIV.
   Marshall and Wiese, *Modern Business*, pp. 339–365.

2. Accounting for the Funds Used:

   Lincoln, *Applied Business Finance*, chap. XIII.
   Kester, Accounting, Volume I.

CHAPTER VII

ADMINISTERING THE INCOME OF A BUSINESS

A. What Becomes of the Income
B. What Becomes of the Profits

As we observed in the preceding chapter, when business men attempt to make profits they find it necessary to keep records in order to tell whether they are succeeding. The records must show, among other things, the income and expenses, since profit is the excess of income over expense.

While income and expense are expressed in terms of money, they are not necessarily income and expense in cash. For example, sales of goods are regarded as income, whether or not customers have paid for the goods in cash. Similarly the cost of the goods sold is regarded as expense, whether or not such goods have been paid for in cash. And some items of expense, such as wearing out of buildings, may never mean any payment in cash. It is income and expense, not in money, but in money's worth that counts.

A. What Becomes of the Income

(Some expenses definitely known; others must be estimated; difficulties of estimating certain expenses)

The income of a business is used first of all to meet the expenses. As we have seen, any income remaining is known as profit and belongs to the owners of the business. If the income falls short of paying the expenses, the difference is

loss and likewise falls upon the owners of the business. In this section we shall consider the primary use of income, namely, the meeting of expenses. In the next section we shall see what happens to the balance of the income, the profits.

Some expenses are definitely known; others must be estimated. — The officers of the Fountain Pen Filling Station Company discovered that while some of their expenses were definitely and exactly known, others could only be estimated. The income statement, shown on page 99, when rearranged to show these two kinds of expenses appeared as follows:

Income Statement for the Year

Sales for the year			$31,000
Expenses definitely known:			
Cost of goods sold	$13,000		
Wages and salaries	7,000		
Repairs	400		
Taxes	200		
Rent	1,160		
Advertising	5,100		
Miscellaneous	240		
Total		$27,100	
Expenses estimated:			
Depreciation	$400		
Bad debts	200		
Total		600	
Total expenses			27,700
Net Profit			$3,300

The first group of expenses, those definitely known, furnished no problem to the bookkeeper, since he had the bills before him and knew exactly what to enter on his books. But the second group caused him a good deal of concern, for no one presented any bills for these expenses. He knew that the machinery and furniture were wearing out during the

year and that this depreciation was just as truly an expense of producing the pen-filling machines as rent and wages were. But how much the depreciation was he had no way of knowing accurately. He also knew that since many of their ink machines were sold on thirty days' trial, some would never be returned or paid for. How much these bad debts would prove to be, he could only guess.

Difficulty of estimating certain expenses. — The problem of estimating the amount of depreciation caused him to inquire what experts had to say on the question. He found that while the experts did not always agree, they had worked out some guiding rules. For example, certain types of frame buildings lasted only ten years, hence their depreciation was 10 per cent a year; certain brick buildings were good for twenty-five years, hence their depreciation was 4 per cent a year; steel and concrete buildings might depreciate at the rate of only 2 per cent a year. Certain kinds of machinery were worn out in five years, while other kinds lasted ten. He found that the books talked a good deal about machinery getting out of date, due to the fact that a more efficient machine was invented. Hence some allowance for machinery becoming obsolete had to be added to, or included in, the allowance for depreciation. The bookkeeper finally decided that ten years was a reasonable length of life to allow for the company's machinery, equipment, furniture, and fixtures. This meant 10 per cent a year allowance for depreciation and obsolescence. The balance sheet showed these items of property were worth $4,000 (see page 103). Accordingly he set down among the expenses the item, " Depreciation, $400."

The problem of estimating how many of the debts owed to his company would prove uncollectible was a somewhat different problem from that of estimating depreciation. He found in the books no standards by which to estimate these

bad debts. Since various businesses differed so greatly in the character of their debts, it was not possible to lay down rules applying to all businesses. He therefore had to fall back on his company's experience in earlier years. His books showed that about 3 per cent of the average amount due his company was never paid. Since the accounts and notes due his company amounted to $6,000, he decided to allow a little more than 3 per cent for this item. Accordingly he entered among the expenses, " Bad Debts, $200."

The experience of the pen-filling company is typical of all businesses. A merchant finds that most of his expenses are easily determined because in each case a definite agreement has been made with some party calling for the expenditure of a certain exact amount. Some of his expenses, however, are indefinite; they must be guessed at. They arise, not through any agreement with outside parties but through conditions inside the business itself; they are not in the form of bills to be paid but rather of allowances to be made. Such, for example, are his allowances for depreciation of his store building, and of his stock of goods on hand; his allowances for goods losing most of their value through change of style; his allowances for accounts that will never be paid.

Similarly, the farmer has definite expenses for such things as seed, implements, fertilizer, and interest on borrowed money. But he has also allowances to make for the wearing out of his land, his buildings, and his fences, if he is to know the total expenses of running his farm. He really makes no profit unless he counts all these expenses and then finds that his income exceeds his expenses.

The householder, in managing the business side of the home, must likewise allow for depreciation on furniture, kitchen and dining-room utensils, and other property owned. The fisherman's boats, the dairyman's herds, the organ

grinder's music box and monkey, all present similar problems. The wearing out of things is an expense. However difficult it may be to estimate this expense, it must be included before profits can be determined.

A reserve fund for depreciation provides cash for new equipment. — Many businesses adopt the policy not only of counting depreciation, but also of laying aside a fund of cash with which to replace the property when it is finally discarded. For example, if a machine costing $100 has a life of ten years, the business would count $10 a year depreciation expense and also lay aside each year a sum of money toward the purchase of a new machine. The fund so laid aside is commonly known as a " reserve fund," because it is reserved for a specific purpose. When the old machine is discarded, the new one is paid for out of the reserve fund. The chief advantage of the reserve fund is that it makes the cash available when needed, whereas if no reserve fund is kept, the business might happen to be short of cash just when the new equipment had to be purchased.

When all expenses have been counted, including those which can only be estimated, then we can tell whether or not a profit has been made. If a profit has been made, the business must adopt some policy of disposing of the profit.

B. What Becomes of the Profits

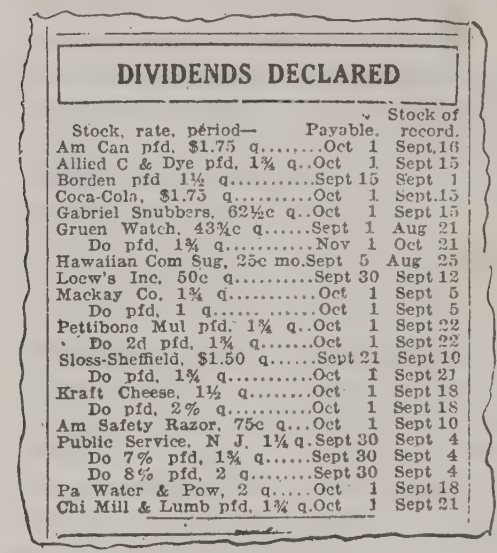
(Profits may be withdrawn from the business; may be set aside for special purposes; may be used for general purposes)

The disposition of profits may be illustrated by the action of the pen-filling company. The books showed at the end of the year a net profit of $3,300 (see page 99). The owners of the company, that is those who had purchased shares of stock in the company, were responsible for the disposition of this

$3,300. But since the stockholders were living in a dozen or more different communities and could not conveniently meet to settle this and other important questions, the stockholders had elected a board of five directors to act for them. Hence the disposition of the profits came before the board of directors. The principal officers of the company were members of the board of directors, and since they knew more about the business than any one else, they naturally had great influence in shaping the directors' decisions. When the directors met to decide what should be done with the $3,300, the president laid before them certain facts and recommendations. He reminded them, first of all, that the stockholders had invested their money in the enterprise with the expectation of receiving returns on their investment; he recommended, therefore, that some of the profits be paid to the stockholders. In the second place, he told them of certain experiments the officers desired to conduct, looking toward improvements in the design of the machine; he recommended setting aside $800 of profits to make possible these experiments. In the third place, he reminded the directors that some of the expense items, such as depreciation, were estimates and could not be made absolutely accurate, hence the real profit might be less than $3,300; that no one knew what the next year would bring in the way of unforeseen difficulties. He therefore recommended that some profits be left in the business to allow for inaccuracies and to strengthen the business in general.

Some profits used for dividends. — In considering the first recommendation, namely, that some of the profits be paid to the stockholders, one director pointed out that the balance sheet showed $26,000 of capital stock outstanding; that since the net profits were $3,300, it was evident that the company had earned $12\frac{9}{13}$ per cent on the stock. ($3,300 divided by $26,000 equals $12\frac{9}{13}$ per cent). He suggested a

dividend of 10 per cent.[1] When the president pointed out that a dividend of 10 per cent would take $2,600 of the profits, leaving only $700 for the other two purposes, the suggestion was changed to 6 per cent. Another director objected that 6 per cent was too low a rate inasmuch as 6 per cent was the prevailing rate of return on quite safe investments whereas the investment in their company was risky, due to the uncertainty over the popularity of their machines. All agreed that in view of the risk involved and the amount earned, 8 per cent would be reasonable. It was so voted, to be paid in four equal installments. Dividend payment dates were set on the first day of February, May, August, and November. The treasurer was instructed to prepare and mail a dividend check for the appropriate amount to each stockholder on these dates. This disposed of $2,080 of the $3,300 profit.



DIVIDENDS DECLARED

Stock, rate, period—	Payable.	Stock of record.
Am Can pfd, $1.75 q.....Oct	1	Sept.16
Allied C & Dye pfd, 1¾ q..Oct	1	Sept 15
Borden pfd 1½ q.....Sept	15	Sept 1
Coca-Cola, $1.75 q.....Oct	1	Sept.15
Gabriel Snubbers, 62½c q..Oct	1	Sept 15
Gruen Watch, 43¾c q.....Sept	1	Aug 21
Do pfd, 1¾ q.....Nov	1	Oct 21
Hawaiian Com Sug, 25c mo.Sept	5	Aug 25
Loew's Inc, 50c q.....Sept	30	Sept 12
Mackay Co, 1¾ q.....Oct	1	Sept 5
Do pfd, 1 q.....Oct	1	Sept 5
Pettibone Mul pfd, 1¾ q..Oct	1	Sept 22
Do 2d pfd, 1¾ q.....Oct	1	Sept 22
Sloss-Sheffield, $1.50 q.....Sept	21	Sept 10
Do pfd, 1¾ q.....Oct	1	Sept 21
Kraft Cheese, 1½ q.....Oct	1	Sept 18
Do pfd, 2% q.....Oct	1	Sept 18
Am Safety Razor, 75c q...Oct	1	Sept 10
Public Service, N J, 1¼ q.Sept	30	Sept 4
Do 7% pfd, 1¾ q.....Sept	30	Sept 4
Do 8% pfd, 2 q.....Sept	30	Sept 4
Pa Water & Pow, 2 q.....Oct	1	Sept 18
Chi Mill & Lumb pfd, 1¾ q.Oct	1	Sept 21

One Day's News of Dividends

The table gives the name of the corporation, the stock (whether preferred or common), the amount of the dividend, how often the dividend is being paid, when it is to be paid, and when the list of stockholders closes for making out the checks. For example, the American Can Company announced a dividend of $1.75 on each share of preferred stock, payable quarterly, to be paid on Oct. 1, to stockholders whose names were in the company's record Sept. 16.

[1] The returns on shares of stock are called *dividends*, while the returns on money loaned are called *interest*.

Some profits may be reserved for special purposes. — The second recommendation, namely, that $800 of the profits be used to conduct experiments looking toward improvements in the machine, was agreed to. One director pointed out that if the experiments were successful, it would mean increased profits in future years, hence would prove to be a good investment. Another mentioned the advantage of using profits rather than borrowing from the bank to pay for the experiments. Borrowing from the bank would create a debt which might be embarrassing to repay in case the experiments failed to accomplish anything, whereas using profits would not create any debt, and hence could not embarrass the company if the experiments were fruitless. The $800 so voted, added to the $2,080 voted for dividends, made $2,880 disposed of. There now remained $420.

CORPORATION REPORTS.

Statements of Earnings Issued by Various Companies, With Comparisons.

Philip Morris & Co.

The report of Philip Morris & Co., Ltd., Inc., for the fiscal year ended on March 31 shows a net income of $477,546 after charges and Federal taxes, equivalent to $1.15 a share earned on 415,465 capital shares. This compares with net income of $439,421 in the previous year, equivalent to $1.06 a share on 413,583 shares.

Canada Dry Ginger Ale.

Canada Dry Ginger Ale, Inc., reports for the quarter ended on March 31 a net profit of $591,739 after depreciation, Federal taxes and other charges, equivalent to $1.16 a share on 508,858 shares of no par stock.

Surplus profits may strengthen the business in general. — The third recommendation, that of leaving some profits in the business without specifying any particular use for them, appealed to the directors as a wise policy. They agreed that the estimates made for depreciation and bad debts were

merely refined guesses, and hence were quite likely to be too low or too high. If they were too high, that is, if more allowance had been made than was really necessary, the company was safe. But if the allowance was too low, the company was fooling itself, because it was counting as profit what should have been counted as expense. Leaving some profits in the business to offset allowances that might be too low, seemed, therefore, to be a good policy. Furthermore, since the future contained many uncertainties, some of which might bring unexpected losses, it seemed wise to hold some profits in the business to take care of emergencies. It was therefore agreed that the remaining $420 should be left in the business without specifying any particular use to be made of it. One director inquired what designation should be given to this part of the profits. The treasurer replied that some businesses labeled it " Undivided Profits," probably because such profits were not divided nor apportioned to any particular purpose. Others called it " Surplus," probably because such profits were surplus profits over and above the profits used for designated purposes. The treasurer recommended the latter term, so the directors voted to add the $420 to " Surplus."

Thus, the disposition of the $3,300 profits was as follows:

Dividends of 8 per cent on Capital Stock	$2,080
Reserve for Experiments	800
Balance added to Surplus	420
Total	$3,300

Profits should be used in whatever ways are best for the business. — The discussion and decisions of the directors in the foregoing case illustrate the principles upon which most boards of directors proceed. They try to dispose of the profits in whatever ways are best for their business. Of course what is best for one business may not be best for another. What is best for a business at one time in its career may not be best for

that same business at another time in its career. At certain times it may be best to keep all of the profits in the business; at other times it may be best to pay out as dividends all the profits made; at still other times it may be best to pay out more profits than have been made in the period just closed, drawing on the profits of earlier periods in order to do it; at still other times (and perhaps typically) it is best to pay out some of the profits and retain some in the business. Each decision must be made in the light of the particular circumstances attending the case.

While usually the profits disbursed are paid out to the owners, in some cases the directors vote to pay some of the profits to others than the owners. Some enterprises share profits with their employees, believing that such a policy will create a better spirit among the workers and thereby ultimately produce more profits. Some firms contribute from their profits to charity organizations and to other welfare agencies.

Essentials of a good dividend policy.—Experience has taught American corporations that there are certain essential principles involved in a good dividend policy. Those responsible for the dividend policy might well strive to follow these principles:

To make the stockholders loyal. — Nothing is to be gained by antagonizing the stockholders, whereas much is to be gained by keeping them loyal. If additional funds are needed from time to time, loyal stockholders may willingly furnish the money, while disgruntled ones may turn a deaf ear to arguments to buy more stock. To make the stockholders loyal, complete information regarding the affairs, especially the financial affairs, of their company should be given them. Dividends should be paid them or satisfactory reasons given for the failure to pay dividends.

To make the dividends regular. — If a corporation is in a position to pay dividends, it should, if possible, pay the same

amount at regular intervals. Paying a certain amount, such as $1.50 per share, each time dividends are paid tends to give the stock an investment standing. Most investors would rather have $1.50 per share, year in and year out, than to receive the same total amount but in varying sums, such as $1.00 the first year, $3.50 the second, and nothing the third.

To keep the company strong financially. — Dividends should not be paid in such amounts as to weaken the company financially. Too liberal dividends may be a worse policy than to pay none at all, for it may bleed the company of the cash needed to sustain life. When dividends are withheld in order to strengthen the company, the reasons should be stated frankly in a letter to the stockholders.

Profits are usually paid out in cash. — A merchant may take away some of his profits in the form of merchandise; a farmer may consume some of his profits sitting about the dinner table; a candy manufacturer may pay a dividend in the form of five-pound boxes of his product. But most business enterprises pay out their profits to their owners in the form of cash. Since cash enables its possessor to buy what he wants, cash becomes the most acceptable form in which to receive profits. And if the business is successful in converting its goods into cash, the business finds it convenient to pay out profits in the form of cash.

Profits retained in the business become added capital. — While stockholders are inclined to measure the success of a company by the dividends they receive, such a measure does not reveal the whole story. A company may be making large profits, but be paying only moderate dividends, retaining the bulk of the profits to strengthen and expand the business. Indeed, it frequently happens that a business which is in need of additional capital finds that the cheapest and easiest way to get that capital is simply to retain profits that

have been earned. If the new capital had to be raised outside the business, for example, by selling more stock, considerable expense would be incurred and the effort might even prove a failure. By retaining profits in the enterprise the new capital is raised without expense or worry. This method of getting capital really means that the stockholders are indirectly contributing the new capital, since they would have received these profits as dividends, if the profits had not been retained in the business. However, the sacrifice is scarcely felt by the stockholders and may in the end pay them well; if the profits are wisely invested, there should be larger earnings and bigger dividends in subsequent years.

Summary. — Business firms cannot know how much profit they are making unless they first know how much their income and expenses are. The principal difficulty lies in certain kinds of expenses, such as depreciation, which cannot be accurately known and must, therefore, be estimated. Since some expenses are estimated, any statement of profits is certain to be more or less inaccurate. In order to make allowance for inaccuracies, businesses usually retain some of the profits in the enterprise. Profits may also be retained in the enterprise in order to carry out certain projects, such as making improvements. Some of the profits are customarily paid out to the owners of the business as compensation for their investment and for the risks they assume. How much of the profits should be paid out and how much retained should be decided in the light of what is best for that particular business at that particular time.

QUESTIONS

1. Define or explain:
   - (*a*) Profits
   - (*b*) Dividends
   - (*c*) Cash dividend
   - (*d*) Depreciation
   - (*e*) Surplus
   - (*f*) Reserves

2. Could a business concern operate for five or ten years showing a loss every year and still remain in business? Why, or why not? Who would suffer these losses?

3. Many farmers complain that farming is unprofitable. What do you think they mean by "unprofitable"? What are some important facts that farmers must know, before they can tell whether their operations are unprofitable?

4. Suppose a farmer wears out a plow in five years. While the plow is being worn out, what becomes of the money value that is disappearing from the plow? How does the farmer recover the money he invested in the plow?

5. The owners of a cotton mill in Rhode Island decided to move their mill to Georgia. Since the buildings and most of the machinery could not be moved, the directors voted that "the move be accomplished over a period of years by using the reserve for depreciation to build the mill in Georgia." What did the directors mean by their statement?

6. Give a case in which it would be good policy not to pay any dividends, even though large profits had been made.

7. Give a case in which it would be good policy to pay a dividend, even though no profits had been made during the year.

8. One of the directors of a corporation contended at a recent meeting that it would be good business to give $1,000 of the profits to a local charity society. What might his reasons have been?

9. Another director argued that they should build and equip a gymnasium and athletic field for their employees "even though we have to stop paying dividends for a year or two to do it." Why might this be a good investment of part of the profits?

10. Suppose a corporation, with $500,000 of common stock outstanding, has just closed a year in which it made $200,000 net profits over and above all expenses. This profit, however, as fast as it was made was reinvested in the business, especially in the enlargement of the plant, so that the corporation has very little cash on hand. Do you think they ought to vote a cash dividend? Give reasons.

11. "The stockholders want dividends. The management sometimes insists on keeping the profits in the business. Disagreement then results."

(*a*) Why do the stockholders want dividends?

(*b*) Why may the management want to keep the profits in the business?

(*c*) Since the management is supposed to represent the stockholders, why do they not agree?

(*d*) How is it possible to satisfy both the stockholders and the management?

TOPICS FOR FURTHER STUDY

1. The Problem of Determining the Profits:

   Dewing, *Financial Policy of Corporations*, Revised Edition, Vol. III, chaps. I, III, V.

   Bonneville, *Elements of Business Finance*, chap. XVIII.

   Gerstenberg, *Financial Organization and Management*, chap. XXVI.

   Mead and Scholz, *Rudiments of Business Finance*, chap. IX.

   McKinsey and Meech, *Controlling the Finances of a Business*, chap. XXXIII.

2. The Disposition of Profits:

   Dewing, *Financial Policy of Corporations*, Revised Edition, Vol. III, chaps. VI, VII.

   Lincoln, *Applied Business Finance*, chap. XXIV.

   Bonneville, *Elements of Business Finance*, chap. XIX.

   Mead and Scholz, *Rudiments of Business Finance*, chaps. X, XI.

   McKinsey and Meech, *Controlling the Finances of a Business*, chaps. XXXIV–XXXVI.

   Gerstenberg, *Financial Organization and Management*, chap. XXVII.

CHAPTER VIII

THE FINANCIAL EXECUTIVE AND HIS WORK

A. The Place of the Financial Executive
B. The Chief Tasks of the Financial Executive
C. Policies Determine the Instruments and Institutions Used

A. The Place of the Financial Executive

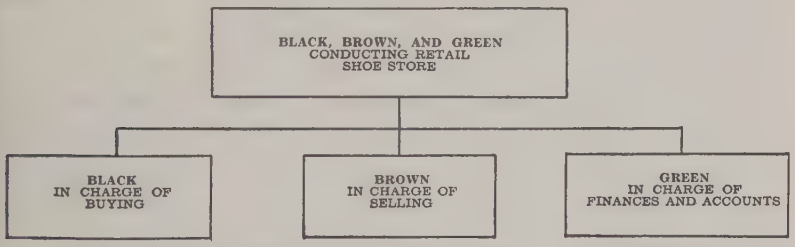
(Relation of the financial executive to other department heads and to the president)

The finances of a business do not take care of themselves. Some one must look after them. For example the tasks of determining the amount of funds needed and keeping account of the funds used (discussed in Chapter VI), call for a financial executive. So, also, does the administration of the income of a business (discussed in Chapter VII). The person in whose hands is lodged the management of finances is the financial executive, whether he has this title, or some other title, or no title at all.

Who the financial executive is. — When a husband brings home his pay envelope and hands it to his wife with the request that she manage the finances, he is asking her to be a financial executive. If the husband and wife divide the income, each agreeing to be responsible for certain expenses, two financial executives have arisen.

In a one-man business, such as the typical farm or the small store, the one man is the financial executive because he settles the financial questions. But he is also the executive in charge of buying, of selling, of operating, of record-keeping, in fact of everything. And herein lie both the strength and the weakness of a one-man business. It is strong because one man has his hand on everything: guiding, directing, coördinating. It is weak because one man cannot be a specialist in the many different aspects of business. If he is good at keeping his accounts and money affairs straight, he may be poor at buying and selling. If he is good at running the farm, he may be weak in managing his finances.

In a partnership the financial executive is likely to be one of the partners. A typical arrangement is as follows:

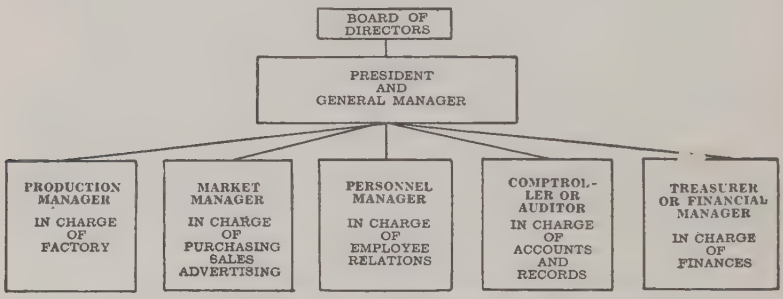


THE PLACE OF THE FINANCIAL EXECUTIVE IN A PARTNERSHIP

This division of work permits specialization. Green may succeed admirably at the job of handling finances, whereas if he tried to sell shoes, he might ruin both the feet of the customers and the trade of the firm.

Our larger businesses are, for the most part, conducted by corporations. In a corporation the financial executive is usually the treasurer, although in many corporations the treasurer is merely a figurehead, while the main financial burdens are carried by some one else, such as the president, or the chairman of the finance committee. Where the treasurer

is the financial executive he generally ranks under the president, but alongside the executives in charge of other major departments. For example:



The Place of the Financial Executive in a Corporation

As the chart suggests, each manager has charge of one phase of the company's business, while all work together under the president to promote the business as a whole.

Qualities needed by a treasurer. — In a very large business the treasurer may have under him a staff of several hundred employees taking care of the details of his department. It goes without saying that the treasurer should be a person trained in financial matters. He should be familiar with our money and credit system; he should know the uses of different financial instruments, such as checks, notes, and drafts; he should know our financial institutions, such as the different kinds of banks, and the services rendered by each; his mind should run toward figures. In order to conduct his department efficiently he needs some knowledge of general business practices; he also needs a grasp of the larger problems confronting his fellow executives; and his honesty is a matter of such importance that businesses generally require a bond to be furnished by an insurance company guaranteeing to make good any losses suffered because of the dishonesty of the treasurer.

B. The Chief Tasks of the Financial Executive

(To coöperate with other executives; to grant credit; to take charge of cash; to raise needed capital)

The chart on the following page shows how the treasurer's department is organized in a large manufacturing enterprise. Not all businesses follow this plan of organization. Some firms do not give the treasurer charge of all these affairs, while other firms place many additional tasks on the financial executive. Much depends on the type of man the treasurer is. If he shows marked ability, he is likely to be given many tasks. If he lacks the qualities of a good executive, fewer responsibilities will be given him.

Some of the more important duties of the financial executive are:

To coöperate with other executives in matters involving the business as a whole. — The treasurer of the pen-filling company was continually being called into conference by the president on questions affecting the business as a whole. "At what price shall we sell our machines?" "Shall we sell them cheaper if one buyer agrees to take three, or five, or a dozen?" "Shall we sell for cash or on credit?" Obviously all these questions involved not only the treasurer's department, but the sales department and the production department as well. Hence they had to be settled by discussion between the various executives. At the discussions the president presided and had the final word.

To grant credit. — Firms that adopt the policy of selling goods on credit must have a credit manager to determine which applicants shall be trusted and which shall be refused. Since careful granting of credit means few losses from bad debts, while careless granting of credit means heavy losses, it is evident that the treasurer is vitally concerned in the grant-

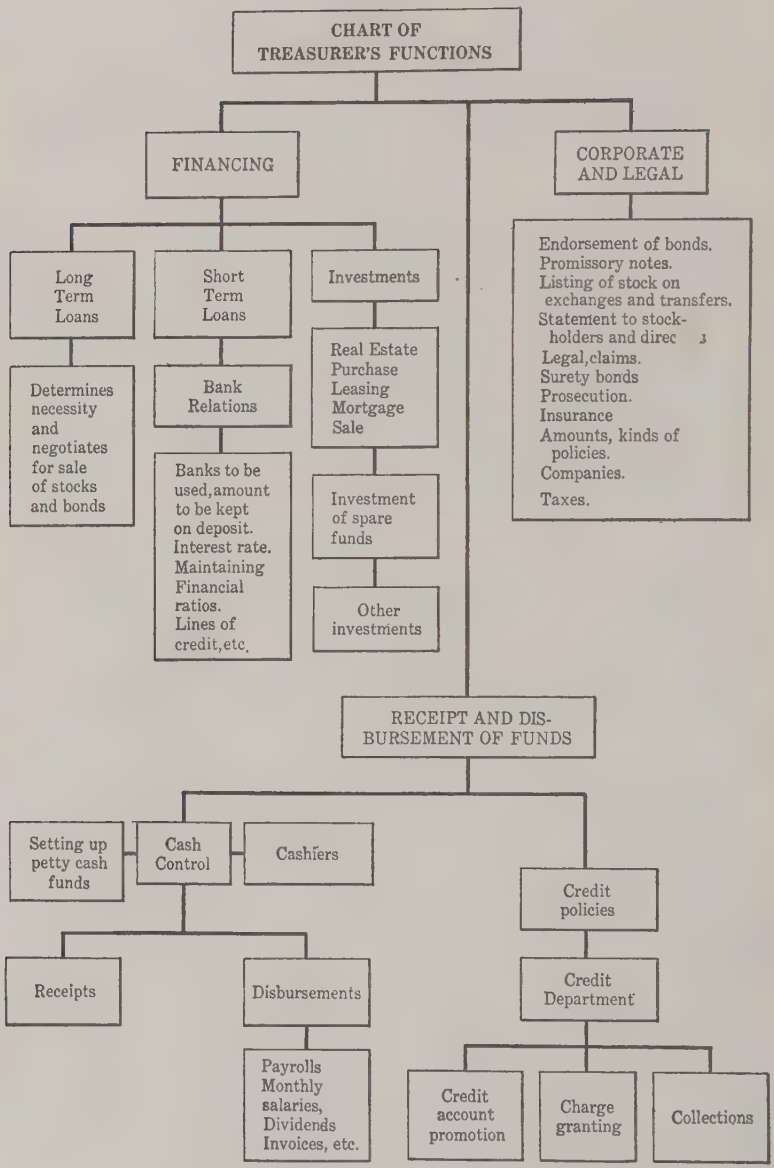


CHART OF TREASURER'S FUNCTIONS
FINANCING
CORPORATE AND LEGAL
Long Term Loans
Short Term Loans
Investments
Endorsement of bonds.
Promissory notes.
Listing of stock on exchanges and transfers.
Statement to stock-holders and direc
Legal, claims.
Surety bonds
Prosecution.
Insurance
Amounts, kinds of policies.
Companies.
Taxes.
Determines necessity and negotiates for sale of stocks and bonds
Bank Relations
Real Estate Purchase Leasing Mortgage Sale
Banks to be used, amount to be kept on deposit. Interest rate. Maintaining Financial ratios. Lines of credit, etc.
Investment of spare funds
Other investments
RECEIPT AND DISBURSEMENT OF FUNDS
Setting up petty cash funds
Cash Control
Cashiers
Credit policies
Receipts
Disbursements
Credit Department
Payrolls Monthly salaries, Dividends Invoices, etc.
Credit account promotion
Charge granting
Collections

ing of credit. In small businesses the credit granting may be turned over to the treasurer personally. In large businesses it may be placed in the hands of a specially trained credit manager who works under the treasurer and is responsible to him.[1]

To manage the cash. — When the treasurer of the pen-filling company studied his problem of managing the firm's cash, he discovered that it had three aspects: the budget, the receipts, and the disbursements.

Budgeting Your Business

The leading and most successful corporations have for some time worked under a budget, but this very important work has thus far stopped with them. Concerns of moderate or small size, however, will find that a business budget is remarkably helpful both in cutting costs and increasing income, thus leading to greater profits. It is a mistake to think that business budgeting is something that applies only to large corporations such as the American Tel. & Tel. Co., the U. S. Steel Corp., the Walworth Co., the Dennison Mfg. Co., Wm. Filene's Sons Co., and other prominent manufacturers and merchants. Such organizations say that business budgeting is indispensable. But actually the company which needs budgeting most is one of moderate capital and facilities, which depends more upon skilful management than unlimited resources. It is the "little fellow" who cannot afford *not* to budget.

From Babson's Reports.

Successful Concerns Are Now Budgeting, Not Only Their Cash, but Also Other Phases of Their Business, Such As Purchases, Sales, and Improvements

The cash budget was his estimate of receipts and disbursements for the coming year. For example, in December, he prepared his cash budget for the next year shown on page 95. With this budget before him he planned his policies. The budget showed that more cash would be disbursed during the spring months than would be received from the sale of machines. This information was valuable to the treasurer

[1] Some businesses make their credit department independent of their financial department. In such an organization the two departments are likely to work together on matters of granting credit and collecting bills.

because it enabled him to plan months ahead how to meet the shortage. Similarly, the budget showed for the autumn an excess of receipts over disbursements; accordingly, the treasurer was able to plan beforehand the most effective use of this surplus cash. The budget became the treasurer's chief aid in planning his care of the company's cash.

The cash receipts came chiefly from the sale of machines, although a little was received from miscellaneous sources, such as sale of ink and interest on surplus cash loaned out. One of the problems connected with the care of cash was the selection of the bank or banks in which the cash should be deposited. Did the company handle sufficient cash to justify opening an account with more than one bank? More than one bank meant more than one source of loans in case of need; but it also meant leaving an idle balance in more than one bank.[1] The treasurer decided that since his firm was rather small, he would maintain an account in one bank only.

The cash disbursements had to be carefully supervised to prevent dishonesty. When a bill was presented it had to be approved by the proper officer; then a voucher, authorizing payment, was filled out; payment was then made, either in cash or by check. (A check is an order on a bank to pay the sum named from the depositor's account.)

The treasurer found certain advantages in paying bills by means of checks. Checks were less expensive and less risky to mail than money. There were fewer mistakes in writing checks than in counting out money. Less money had to be kept in the office when most bills were paid by check. Finally, after a check had completed its journey, the bank returned it to the treasurer, who filed it in his safe as proof that the bill had

[1] Most city banks charge their depositors a small sum monthly if the depositor does not maintain in his deposit account an average balance of a certain amount, such as $100.

been paid. For these reasons only small expenses, such as telegrams and postage, were paid in cash.

To care for valuable papers. — Some customers give their promissory notes when buying goods. These notes must be carefully kept, their maturity dates watched, and collection made when the notes are due. Insurance policies must be kept in force and revised from time to time as conditions change. Deeds to the firm's property, important contracts, financial documents, records, and reports may all be placed in the custody of the treasurer.

To raise needed funds. — Another duty falling on the treasurer is that of raising needed cash. When, for example, the cash budget shows that there will be a shortage of cash during the spring months, as with the pen-filling company, it is the duty of the treasurer to provide for the shortage. He may do this by arranging for a loan at the bank; he may push vigorously the collection of accounts owed to his firm, thereby increasing cash receipts; his ingenuity and experience may suggest still other methods that may be used.

The problem just considered, that of raising relatively small amounts of cash for short periods of time, is not likely to prove as troublesome to the treasurer as another type of cash-raising problem. From our discussion of " Funds and Their Uses " (Chapter VI) we realize that from time to time every business faces a crisis and must adjust its affairs to new conditions and that the treasurer has a heavy responsibility at such times. In many cases the plans involve the raising of large sums of money, to be kept in the business for many years. Such a situation is exemplified in the case of the pen-filling company. It will be recalled that this company arrived at the "parting of the ways" after three years (see page 96). The program of expansion decided upon by the officers and directors called for $81,000 of new capital. The treasurer had

the responsibility of raising this amount. As the treasurer wrestled with this problem he realized that he had really three problems:

1. How can this money be raised cheaply, yet not incur too many risks for the company?

2. What instrument shall be used — stocks, bonds, or notes?

3. Who shall raise this money? That is, shall the company raise the money itself, or shall it pay others a commission for raising the funds?

These questions were interrelated. It was impossible to answer one without considering the others. The treasurer, after much thought and some consultation with others, recommended to the president and board of directors the following:[1]

1. That the new capital should be raised without going into debt. A debt should be avoided because it meant risk of bankruptcy in case the company could not pay interest and principal as they fell due.

2. That stocks should be the instrument used, since stocks carry no risk of bankruptcy for the company.

3. That the company should raise the capital itself. Since the amount was relatively small, high-grade investment bankers either would not undertake the task at all or would charge too much commission if they should undertake it.

These experiences of the treasurer reveal some of the duties and perplexities that financial executives face. The treasurer has important connections with those inside his own firm as well as with customers, bankers, and others outside the firm. Funds flow into his hands from various sources; they

[1] The reasons for these recommendations will be clearer when the discussion of stocks, bonds, and financial institutions has been read. See, especially, Chapters IX and X.

flow out through various channels to various individuals. The treasurer, as the center of cash activities, may be pictured as follows:

THE TREASURER'S HANDLING OF FUNDS

Who Furnish the Funds	*How the Funds Come In*		*Purposes for Which Funds Go Out*	*To Whom Funds Go*
Customers buying firm's product	Collections from sales		Marketing expenses	Salesmen Advertising men
Stockholders and depositors of banks	Loans from banks	TREASURER OF THE CONCERN	Office expenses	Employees
Investors	Sale of securities		Factory expenses	Employees Raw material dealers Transportation cos.
Users of property of firm	Interest and rent		Payment of debts, interest, dividends	Those to whom obligations are owed

As the chart shows, the work of the treasurer brings him in touch with customers and financiers who supply the cash needs of the business; likewise with fellow employees and outside firms to whom the cash is paid. Through the financial executive's hands there flows a steady stream of business calling for the collection and disbursement of money.

C. Policies Determine the Instruments and Institutions Used

(Policy adopted first, then instrument and institution chosen to carry out the policy)

The instrument depends on the policy. — From time to time we have suggested that the instruments used by an executive depend on the policy he has adopted. For example, when the executives of the pen-filling company decided to raise $81,000

of new capital by appealing to the public to come in as owners, that decision settled the question of the instrument to be used. Shares of stock became the instrument, because shares of stock are the instrument which evidence ownership in a corporation. When the treasurer decided to borrow from the bank to tide over a cash shortage, there was but one instrument to use, the promissory note. Thus the first question to decide is: What shall our policy be? Then the other question can be decided: What instrument shall we use to carry out that policy?

The institution used also depends on the policy. — Not only does the choice of instruments depend on the financial policy adopted, but the choice of institutions does likewise. Shall the treasurer borrow from a commercial bank, a savings bank, or a trust company? Shall the home builder get his funds from a mortgage company, a building and loan association, or a private individual? Questions of this kind can be answered only after a financial policy has been adopted. In some cases custom practically decides the choice of institutions. In others the choice must be made by the one in charge of finances.

The table on the following page shows the relation between policies on the one hand and instruments and institutions on the other.

The financial executive has much to say about the choice of policies, instruments, and institutions, but he does not have everything to say. Conditions beyond his control sometimes decide such matters. He may decide, for example, to lend the firm's surplus cash to a borrower who offers to pay 8 per cent interest; when the agreement is submitted to the firm's attorney he may notify the treasurer that the state law forbids an interest charge in excess of 7 per cent, thus forcing the treasurer to change his policy. He may wish to borrow

money from a bank for two and one-half months; the bank, however, notifies him that loans are made for two months or for three months, but not for two and one-half months. He might be firmly convinced that a certain policy would be the best to pursue, but if it were contrary to customary business practice, he would probably be forced to change his plans.

If the Policy Is To:	*Then the Instrument Used Will Be:*	*And the Institution or Source of Funds Will Be:*
1. Borrow funds for a short time	Promissory note	Commercial bank Individual lenders Commercial paper house Acceptance company (and perhaps others)
2. Order your debtor to pay	Draft	The debtor
3. Raise funds from the owners of the business	Receipt Certificate of partnership Stock certificates	Individuals Partners Stockholders (in a corporation)
4. Borrow funds to help build a home	Promissory note (usually secured by a mortgage)	Savings bank Building and loan ass'n Commercial bank Insurance company Mortgage company Individual lenders (and perhaps others)
5. Borrow funds to help build a business structure	Promissory note Bonds	Savings bank Insurance company Bond house Mortgage company (and perhaps others)

Having dealt with policy matters in this section (Part II), it remains to show how instruments and institutions operate in carrying out policies. In Part III we shall see how the

leading instruments are used; in Part IV how the leading financial institutions work.

Summary. — The management and supervision of finances call for a financial executive. In a business organization this executive is usually known as the treasurer. His duties call him into conference with other executives, in order to devise policies for the business as a whole. Within his own department he is responsible for such matters as the granting of credit, the raising of needed capital, the planning of the cash budget, and the care of the cash and valuable papers of the business. In forming his policies the treasurer keeps in mind the various financial instruments and institutions that society has made available for his use. These instruments and institutions then become the means through which his policies are carried out.

QUESTIONS

1. Why must the choice of instruments and institutions usually wait until the choice of policies has first been made?

2. Show why the treasurer may be unable to formulate his policy until after the president and other executives have formulated their policies.

3. "The question before the board of directors was: Shall we put up our store building or continue to rent from Laird & Bacon?"

(*a*) Show why the financial executive should be consulted by the directors before deciding the question.

(*b*) Show why certain other executives should also be consulted.

(*c*) In case the directors adopt the policy of building their own store, show why financial instruments and institutions will immediately arise as questions to be settled.

(*d*) Indicate the chief added duties which will fall on the financial executive in case the directors decide to build.

4. Could the president be the financial executive? Could he be the production manager? In case he acts as the financial executive, would he likely delegate to subordinates all the financial work except the most important questions of policy? Why?

5. Suppose you are the treasurer of a firm. Suppose there are a dozen banks in the city. You must choose one with which to open an account

for your firm. List the half dozen most important factors to be considered in making the choice.

6. Why is the granting of credit usually placed in the financial department of a business? Show how credit granted wisely lightens the cares of the treasurer.

7. "In December we make our cash budget for the following year. This budget is of great value both to our treasurer and to the banker from whom we borrow money." Explain these statements.

8. Suppose the cash budget shows that the firm will be short of cash to the amount of $12,000 in June, but will have a surplus of cash amounting to $16,000 in November. Suggest several ways of meeting the situation.

9. Suppose the plans of the business call for the raising of $150,000 for a new building. Show why this presents a more difficult problem to the treasurer than the problem in the preceding question.

10. "The financial executive is brought into intimate contact with instruments for raising funds and with institutions supplying funds. His success as an executive depends, in large part, upon the skill with which he handles the instruments and upon the judgment he displays in selecting the institutions." Explain.

TOPICS FOR FURTHER STUDY

THE WORK OF THE FINANCIAL EXECUTIVE:

McKinsey and Meech, *Controlling the Finance of a Business*, chaps. XII, XIII, XXXVII.

Marshall and Wiese, *Modern Business*, pp. 326–336; 366–374.

PART III

FINANCIAL INSTRUMENTS AND THEIR USES

PURPOSES OF PART III

1. To show how financial instruments are used to carry out financial policies
2. To indicate why a variety of financial instruments are in use

CHAPTER HEADINGS OF PART III

Chapter IX. How Shares of Stock Are Used
Chapter X. How Notes and Bonds Are Used
Chapter XI. How Drafts Are Used

Some time since, the financial world was startled by the announcement that an investment banking firm in New York had purchased a well-known automobile company for $146,000,000 cash. A few days later the bankers sold bonds to the amount of $75,000,000 and stocks to the amount of $85,000,000 to the public, thus recovering what they paid plus about fourteen million dollars gross profit. Besides the cash profit made, the bankers retained sufficient common stock to enable themselves to control the company.

Why did the bankers create both bonds and stocks to be sold to the public? What are the differences between bonds and stocks? If the bankers wanted to keep control of the company, why did they retain the *common* stock?

A wholesale grocer in St. Louis bought $20,000 worth of olives from a firm in Spain. To carry out the deal it was necessary for the grocer to arrange with his bank in St. Louis for certain instruments, including a commercial letter of credit and a banker's acceptance. When these instruments had been arranged for, the Spanish firm promptly shipped the olives in perfect confidence that they would get their money even though the St. Louis grocer could not pay for them.

How did these instruments make it possible for the grocer to get his olives on credit? How could these financial instruments guarantee payment for the olives?

CHAPTER IX

HOW SHARES OF STOCK ARE USED

A. How Shares Are Used in Organizing and Controlling a Corporation
B. How Shares Are Used in the Development of a Corporation
C. Policies May Call for Special Kinds of Shares

We have been examining the financial policies of a business firm and how the financial executive goes about his task of formulating policies. We have seen how the work of the financial executive brings him in touch with financial organizations outside his own business; how he comes in contact with banks; how he uses notes and other instruments in carrying out his policies. We are now to take up in Part III the more important financial instruments and see how and why they are used. And first we begin with shares of stock, an instrument used by every business corporation.

A. How Shares Are Used in Organizing and Controlling a Corporation

(Reasons for incorporation; shares signify ownership and give voting power; some stockholders active, others indifferent)

Shares of stock not used by simple businesses. — If a person is starting in business or professional life for himself, say as a farmer or a teacher, he has no reason to issue shares of stock. No one besides himself is involved in the ownership

of the enterprise. He doesn't need to issue shares of stock to raise the capital needed.

With a partnership the case is similar. Suppose Black, Brown, and Green form a partnership to conduct a retail shoe store. Each invests $5,000. A partnership agreement is drawn up and signed providing for the conduct of the business by the three men, the salary each shall draw, the division of profits and losses, and other details. The management of affairs is divided among the partners according to the plan shown on page 121.

In the partnership, as in the enterprise owned by one man, the dealings with the public are simple and direct. In making agreements and contracts, every one concerned usually knows who is responsible. Shares of stock are not necessary, either to raise the capital or to show the proportion of the business owned by each partner.

Shares of stock used by corporations. — Quite different is the corporation. The partnership is inseparable from the partners; they really are the partnership. On the other hand, a corporation is separate and distinct from the owners of the corporation. It is a being created by law, an artificial person with an existence entirely separate from the existence of the persons forming the corporation. It possesses whatever powers the law confers upon it; it meets whatever obligations the law requires it to meet.

To understand why and how corporations are formed, and how shares of stock are used in their formation, we may follow the career of the Black, Brown, and Green partnership mentioned above. For several years they have conducted their retail shoe store successfully.

It is the evening of January 14. The books for the past calendar year have just been closed, showing that after all expenses have been paid (including salaries for the partners,

interest on funds invested by each partner, and depreciation on their building, fixtures, and merchandise) there remains a net profit of $5,400. Black says, "Do you know, men, for some time I have been thinking we ought to incorporate. I have a house on the hill worth $20,000 and those two farms west of town. Altogether I suppose I'm worth about $70,000 outside of my interest in this store. Suppose something should happen to our business and it should go under, with a heavy debt unpaid. According to law they could take my farms and my home from me. Don't misunderstand me; I'm not hinting that we are about to fail, or that you are crooked. But we all know that many firms fail every year without the fault being traceable to any one. Conditions beyond human control carry them down. By incorporating we can place our outside property beyond the reach of creditors. According to law, as you know, the owners of an ordinary corporation are not liable for the debts of the corporation. I confess I'd feel safer."

"I, too, favor incorporation," remarked Green. "While I agree with Black that it would be a good thing to limit our liability, I have been thinking of the advantages of incorporating from another standpoint. I think the time has come for us to expand our business. We ought to open a store on the south side and one in Sunset Hills [a suburb]. We could increase our sales nearly threefold, whereas our expenses would be only about twice as heavy as at present, owing to the fact that some items, such as our own salaries, need not be increased at all, and others will be increased only slightly. If Black were buying for three stores instead of one, he could get shoes considerably cheaper. If we make a success of these two stores, I'd favor adding others later on. To open two new stores would require about $20,000 of new capital. To raise these funds and prepare the way to raise still more later

on, I advocate incorporating. Then we could issue and sell shares of stock as we needed money. There are a dozen men I could name right now who would eagerly join us in a corporation. But they wouldn't enter our partnership, even if we invited them; they would be afraid of the financial liability Black was talking about. If we want a bigger business, we should incorporate to get the funds."

"Well," said Brown, "I guess I'll have to fall in line. I am not eager to expand the business as Green urges, because I'm afraid when we spread out, a lot of leaks will creep in; I fear we shall be disappointed in the results of such a policy. Neither am I greatly concerned about my unlimited liability, the thing that worries Black. My wife and family manage to get rid of my money as fast as I make it, so I have nothing for anybody to seize, in case we fail. Then, too, you must remember it is more expensive and troublesome to run a corporation than it is to run a partnership. Taxes are usually heavier, annual reports must be filed with the state, while red tape is involved in getting the charter, obtaining permission to sell the shares of stock, and operating the corporation. But if you two want a corporation, I'll not stand in the way. And I do see this additional advantage in it: If one of us should die, the business would go right on if it were a corporation, whereas it would stop instantly if it were a partnership. A corporation may have indefinite life. The death of a member simply means that his shares pass to some one else."

The result of the evening's discussion was the appointment of an attorney to look after legal matters and to obtain a charter, or certificate of incorporation. The charter, which was issued by the Secretary of State under the state's general corporation laws, authorized the formation of the E–Z Tread Shoe Company, and stated in broad terms the powers of the corporation. The capital stock of the company was fixed

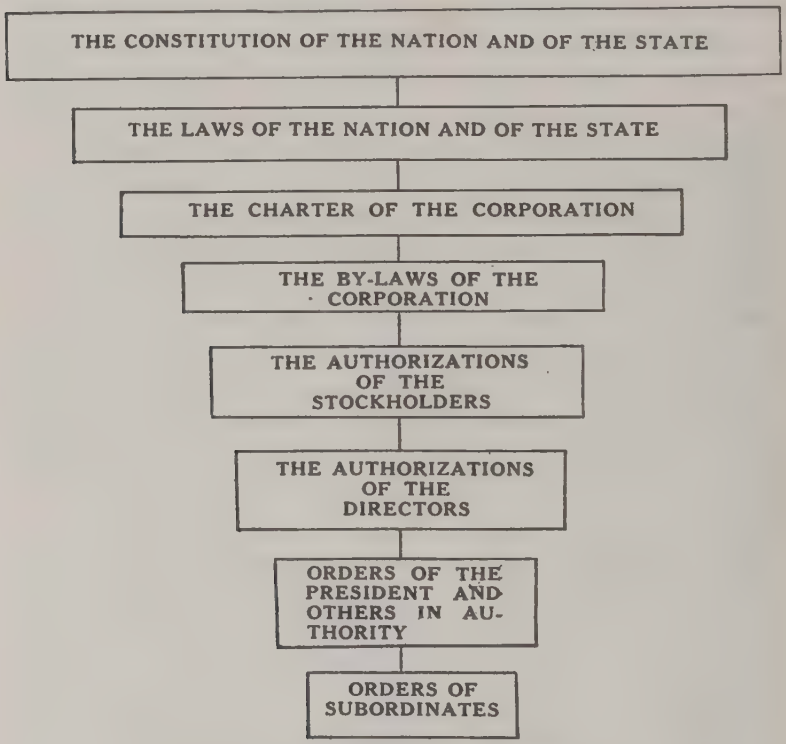
at $50,000, divided into 500 shares; each share therefore had a nominal, or par value, of $100. The three partners turned over the property of the partnership to the corporation, receiving in exchange 300 shares of stock, 100 for each man. This wiped out of existence the partnership and made the three men stockholders in the corporation. The remaining 200 shares were sold for $100 each, the $20,000 being used to open the two new stores. This sale of shares brought eight more stockholders into the corporation, but since the three founders of the business held 300 shares, while all the other stockholders together held only 200 shares, the three were able to control the decision on all questions coming before the stockholders.[1]

Shares of stock signify proportion of ownership. — As the foregoing case illustrates, shares of stock indicate, not only the fact of ownership in a corporation, but also how much ownership a person has. For example, Black owned 100 shares; there were 500 shares altogether; therefore Black owned $\frac{1}{5}$ of the corporation. Similarly, Brown and Green each owned $\frac{1}{5}$. If Gray had owned one share, he would have owned $\frac{1}{500}$ of the corporation.

Shares of stock usually give voting power. — The owners of a corporation are supposed to decide how the corporation shall be run. However, very few owners find it possible to give their time and attention to corporate affairs. To meet this difficulty several devices have been created. One of these is the device of adopting a set of by-laws which settles a number of questions, such as the time and place of the annual meeting of stockholders, the time and place of directors' meetings, and the duties and powers of the various officers. Another and more important device is that of electing from among the stockholders a board of directors to represent the

[1] The rule for voting in a corporation meeting is one share one vote, not one man one vote.

stockholders and to decide important questions of policy. Finally, some matters of policy are left to the officers, who are chosen by the board of directors. The line of authority in a corporation runs as follows:


THE CONSTITUTION OF THE NATION AND OF THE STATE
THE LAWS OF THE NATION AND OF THE STATE
THE CHARTER OF THE CORPORATION
THE BY-LAWS OF THE CORPORATION
THE AUTHORIZATIONS OF THE STOCKHOLDERS
THE AUTHORIZATIONS OF THE DIRECTORS
ORDERS OF THE PRESIDENT AND OTHERS IN AUTHORITY
ORDERS OF SUBORDINATES

Lines of Authority in a Corporation

Thus a corporation is an artificial person, the creature of the state. For convenience, the ownership is divided into shares, permitting investors to buy many or few shares as they choose. The human beings responsible for the organization and ownership of a corporation are known by various names, such as stockholders, shareholders, owners, and members.

Practically, the stockholders have a contract with the corporation by which they agree to invest their capital, assuming the risk of losing it, in return for which the corporation agrees to recognize them as its owners and to leave to them control of the affairs of the company. The evidence of this agreement is a stock certificate placed in the hands of the

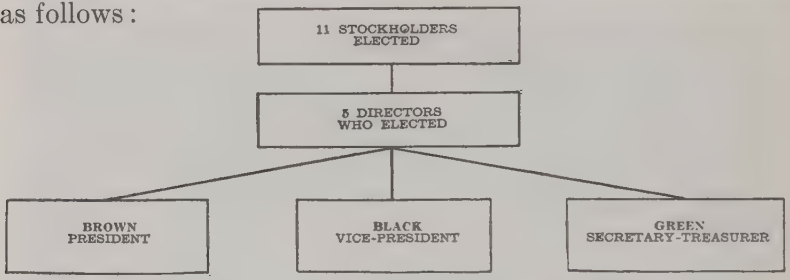
Stock Certificate

stockholder. As the illustration shows, the stock certificate states that the person named is the owner of a certain number of shares of the capital stock of the corporation; it also states certain other main features of the contract.

In small corporations the stockholders are generally active. —We observed that when Black, Brown, and Green converted their partnership into a corporation they took 300 shares of the stock, while eight other persons bought the remaining 200 shares. Since these eleven stockholders lived in the same

community, they naturally took an active interest in the corporation's affairs and were able to decide most of the important questions confronting the business.

The five directors, however, had to decide some matters, such as the election of officers and the disposition of profits. When the officers had been elected the chart of organization appeared as follows:



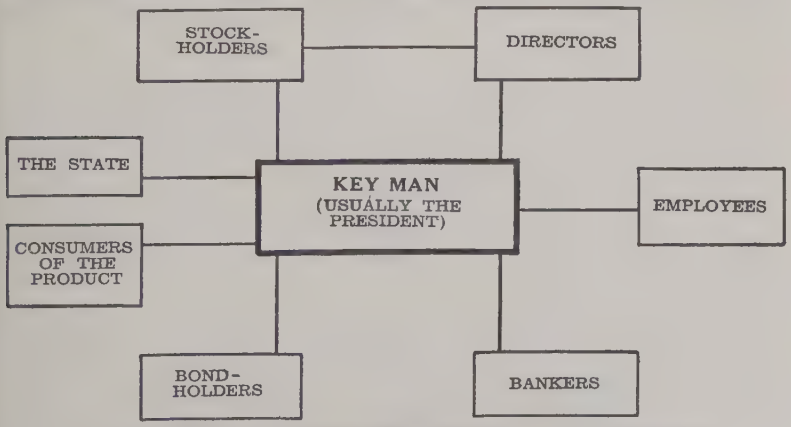
Organization within a Small Corporation

In large corporations most stockholders are indifferent. — Suppose instead of a corporation with eleven stockholders living in the same town, we had a corporation with 40,000 stockholders scattered over the entire country.[1] It would be impossible to have them meet to decide anything. The result is that a few individuals usually control a large corporation. Frequently one person, a key man, dominates the affairs of a large enterprise. Such a concern may employ a hundred thousand workers and sell a hundred million dollars' worth of product annually, yet be controlled by one person. The typical stockholder does not know what is going on. If he receives his dividend checks regularly, he does not care greatly what goes on. Even if he were interested, the time and place of the stockholders' meetings make it practically impossible for him to attend. Accordingly, the "insiders" usually have

[1] In a recent year the U. S. Steel Corporation had more than 110,000 stockholders, the Pennsylvania Railroad more than 153,000, and the American Telephone and Telegraph Company had over 450,000.

things their own way. Before a stockholders' meeting is called, the officers (who have access to the names and addresses of the stockholders) readily secure a sufficient number of proxies to enable them to vote a majority of the shares. (A proxy is a signed permit authorizing some one else to vote one's shares). This insures them control of the meeting. Meetings of the board of directors may be similarly dominated by the key man or men. Directors usually feel that they know less about the business than the officers who are giving full time to the work. If in addition they owe their election to the all-important man, they are not likely to oppose his will. It is not surprising, therefore, that directors commonly meet and simply vote to approve whatever the officers have done or seek to do.

While in theory, therefore, the lines of authority in a corporation run from the stockholders to the directors to the officers (as suggested in the chart on page 144), actually the authority is more likely to be found centered in some one key man, with the various groups interested in the corporation looking to this one man for the final word. The accompanying chart suggests this more realistic view of the corporation.



A Realistic View of the Organization of a Corporation

B. How Shares Are Used in the Development of a Corporation

(To raise capital; to reward services; to distribute as a bonus; to pay dividends)

We have seen that the owners of a corporation hold shares of stock as evidence of their ownership, that the shares show how much of the corporation each owns, and that these shares confer voting power which may or may not be used. Shares of stock are also a useful device in developing a corporation after it has been launched.

Shares are used to raise capital. — Both at the inception of a corporation and from time to time after it has started, capital must be obtained. When the funds for a new corporation are being raised, the instrument most commonly used is shares of stock. Typically the organizers go to prospective buyers with something like the following: "Don't you want to join our corporation? We have a fine proposition [explaining it]. We are confident we are going to make money. If we do, you will get handsome returns on your investment. We are offering the stock at $—— per share."

In fact, for a new corporation, shares of stock are about the only instrument that can be used to raise the needed funds. As a rule, money cannot be borrowed because the corporation is new, has no established earning power, and for that reason is risky. The appeal therefore must be to those who will take a risk in the hope of reaping large profits; in other words to stockholders.

Periodically, as we have seen, readjustments must be made in the finances of business firms (see page 96). When a period of expansion comes, shares may be the instrument chosen for securing the additional capital. It may be that

the directors do not think it wise to incur a debt, fearing the business may be unable to meet the interest and principal when due. Accordingly, they will not borrow the funds, but will order more shares sold. It may be that the corporation has borrowed all that it can, so that the only door open is to sell shares of stock. It may be that the investment market is hungry for stocks, hence stocks can be sold to advantage. Whatever the reason may be, corporations commonly issue shares of stock from time to time after they have become going concerns.

When the executives of a corporation decide to issue more stock, the usual practice is to offer the new shares first to the old stockholders. Indeed the law generally requires that this be done, chiefly because it is considered just that those who have already borne the risks of the business be given first chance to buy, in case more shares are being offered. The privilege extended to old stockholders to buy new stock is known as a " right." If the stockholder does not care to exercise his " right," he may sell it to some one else.

Deciding the number and par value of shares. — Before shares of stock can be offered for sale, a price must be placed on them. Before a price can be placed on them, the executives must know how much capital they need to raise. In the case of the pen-filling company the executives estimated the capital needed to start their business at $32,440 (see page 94). To provide this amount and allow for future expansion, they decided to authorize in their charter a total capital stock of $50,000. Since they expected to sell a good deal of the stock among persons of moderate incomes, they decided to make the selling price of shares $5 each, and create 10,000 shares. They had printed on the stock certificates the statement " shares of the par value of $5 each." Since they sold the shares at $5 each, the selling price and the par value were the

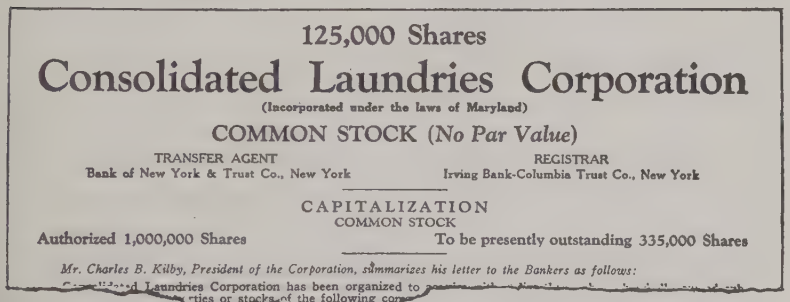
same. The shoe company, cited on page 141, made the par value of its shares $100, and sold the shares at par.[1]

The practice of placing a par value on shares has its advocates and its critics. Its advocates say that since the public is accustomed to thinking of shares having a par value, it is easier to sell shares with par value than those without par value. Another argument is that when shares have a par value, dividends can be declared in percentage, such as 8 per cent a year, this being a more familiar method than a declaration in dollars per share, which is the method used in case of no-par shares. Furthermore, they claim that the total par value of outstanding shares tells approximately what has been invested in the concern by its owners, since a corporation usually sells its shares at, or close to, par.

The critics of the policy of placing a par value on shares insist that par value is meaningless. A share of stock, they say, is simply a fractional part of the ownership. It signifies nothing to stamp a par value on the certificate, indeed it may do harm because it may fool some persons into believing that the par value is the actual or market value. Actual or market value depends, not on figures stamped on a certificate, but on the profits being earned and the future prospects of the corporation. We are told, further, that omitting par value from shares tends to place investors on their guard in buying, since they are not misled by the figures of par value.

[1] In some cases corporations sell their shares above the par value; in others, below; and in still others, at par. The general rule is that they get as much as they can. The par value most frequently used by American corporations is $100, although amounts above and below this are often found. Mining and oil companies have a tendency to use low par values, such as twenty-five cents or one dollar per share, since such stocks are usually hazardous speculations and must be made cheap to appeal to buyers. An extreme case was that of an oil company incorporated in Colorado which made the par value one mill, but sold its stock at one thousand per cent of par, that is, at one cent per share.

Whatever merits these arguments may have, the fact remains that an increasing number of corporations are issuing shares without par value. One reason for the popularity of such shares is the fact that they may be offered to the public at different times at different prices without violating the law. For example, suppose a financial executive has the task of raising capital by selling shares of stock to the public in 1925 and again in 1930. In 1925 the investment market conditions may be favorable, and he may be able to sell the shares



125,000 Shares

Consolidated Laundries Corporation

(Incorporated under the laws of Maryland)

COMMON STOCK (*No Par Value*)

TRANSFER AGENT
Bank of New York & Trust Co., New York

REGISTRAR
Irving Bank-Columbia Trust Co., New York

CAPITALIZATION
COMMON STOCK

Authorized 1,000,000 Shares

To be presently outstanding 335,000 Shares

Mr. Charles B. Kilby, President of the Corporation, summarizes his letter to the Bankers as follows:

Consolidated Laundries Corporation has been organized to

rties or stocks of the following

orte

ADVERTISING AN ISSUE OF NO PAR STOCK

at $110 each. In 1930 market conditions may be unfavorable, and he may be able to get only $70 each for the shares he is then issuing. With no-par shares he could sell some for $110 in 1925 and others for $70 in 1930. On the other hand, if his company's shares had a par value, say of $100, the law in most states would require that he sell the shares for at least $100. If market conditions made it impossible to get $100 for each share, he would be compelled to use some instrument other than shares of stock to raise the needed capital.

While shares of stock are used most frequently for corporate organizing and controlling and capital raising, it still remains to point out several other uses.

Shares are used to reward services. — When a corporation is being organized, it is a common practice for the organizers to reward themselves for their services with shares of stock. Since the new company seldom has cash to spare, and since the organizers will work harder for the success of the company if they hold stock in it, the arrangement seems fair, provided of course that the amount of stock so given is reasonable in amount. Similarly stock is sometimes given to bankers and security salesmen as their reward for selling bonds or stocks for the corporation. This conserves the cash of the company and sometimes causes the financiers and salemen to take an active interest in the successful conduct of the business.

Shares are used as a bonus with other securities. — Suppose a corporation is offering to the public some shares of preferred stock (to be explained presently). The price is par, $100 per share. The public may be indifferent to the offer of the preferred stock alone, feeling that there are other investments available that are more attractive. But if the corporation will offer one share of common stock with every share of preferred purchased, the sale may be a success. The buyer may feel that he is getting something for nothing; he may believe that the common stock will be valuable some day, even if it has little or no value when he receives it. From the corporation's viewpoint, the financial manager may be convinced that the cheapest way to raise the capital is to throw in a share of common stock with every share of preferred purchased. In like manner shares may be given as a bonus when bonds or notes are being offered for sale.

Shares are used to pay dividends. — A dividend may be paid to the stockholders in the form of stock instead of cash. In this event, new shares are created and mailed to the stockholders. The use of a stock dividend may be seen in the following incident:

During the years 1925 to 1929, a certain automobile corporation made very heavy profits. Although it paid liberal cash dividends, the profits remaining undistributed ran into high figures. These undistributed profits (called surplus) were invested in extensions to the factories, in new machinery, and in heavy advertising campaigns. The market value of a share of the company's stock rose from about $70 in 1925 to $236 in 1929, responding to the large profits made and to the increasing value of the company's property. In January, 1929, the directors voted a 100 per cent stock dividend, which meant that the corporation doubled the number of shares of stock outstanding, giving each stockholder as many new shares as he held old ones. The newspapers referred to it as another case of "cutting a melon." There were three reasons why the directors voted the stock dividend. One was that they wanted to pacify the stockholders who were clamoring for more dividends. Since the profits were being invested in extensions of the business, they were not available for distribution in the form of cash. Yet the company was abundantly able to pay an extra dividend. The directors wanted to give the stock-

STOCK DIVIDENDS DECLARED.

Extra Payments and Increased Rates Also Announced.

Two stock dividends and an equal number of special cash dividends were announced by corporations Monday in addition to increases in rates.

The Textile Banking Company declared a stock dividend of 25 per cent in addition to the regular quarterly payment of $2 a share on capital stock. Upon payment of the stock dividend on Jan. 2 the capital of the company will be $2,500,000. It is proposed to reduce the par value of the shares from $100 to $25 by a split-up on a four-for-one basis. The stockholders will vote on this step on Jan. 7.

The Incorporated Investors declared a stock dividend of 2 per cent in addition to the regular quarterly cash dividend of 40 cents.

The Federal Terra Cotta Company

holders something, but were not in a position to pay out cash.

Another was that the directors desired to bring down the market price of the company's stock so that more persons would become stockholders. By doubling the number of shares the market price per share would fall about one half. This would bring the shares within the reach of more investors, thereby increasing the number of shareholders. This in turn would increase the number of friends for the company's products and would make it easier to sell shares directly to the stockholders in the future. Still another reason was that the directors desired to make possible the payment of larger cash dividends in the future without increasing the rate. The rate had been $8 per share yearly. With 100,000 shares outstanding this meant $800,000 a year cash dividends. The reinvestment of profits had about doubled the earnings, thus making it possible to double the cash dividends in the future. If no stock dividend were issued, doubling the cash dividend would mean a rate of $16 per share annually. The directors were afraid of the criticism such a rate would provoke from those who would claim the corporation was making too much money. By doubling the number of shares through a stock dividend of 100 per cent, the rate of cash dividends could be kept at $8 per share, but this would take $1,600,000 of the profits, thus distributing the increased earnings without announcing any change in rate.[1]

[1] When the Federal Income Tax Law was passed, the question arose as to whether the receipt of a stock dividend constituted a receipt of income. The Supreme Court decided (and most economists agree) that a stock dividend is not income. In the case of a *cash* dividend, the corporation parts with the cash while the stockholder receives the cash, hence a cash dividend *is* income to the stockholder. But in the case of a *stock* dividend the corporation parts with nothing; it simply breaks up the existing stock into more shares. Each share is worth less than before the new stock was created, but each stockholder has proportionately more shares, so the total worth of his holdings is about the same as before.

The effect of a stock dividend on the balance sheet of a corporation may be seen in the following:

Before the Stock Dividend

Capital Stock (5,000 shares, par value $100)	$500,000.00
Surplus (profits retained in the business)	750,000.00
Total Ownership Value	$1,250,000.00

After Paying 100 per cent Stock Dividend

Capital Stock (10,000 shares, par value $100)	$1,000,000.00
Surplus (having transferred $500,000 to Capital Stock)	250,000.00
Total Ownership Value	$1,250,000.00

C. Policies May Call for Special Kinds of Shares

(Use of preferred shares; shares with special features)

We have already observed that the stockholder and his corporation enter into a contract with each other. The terms of this contract are somewhat flexible, permitting various provisions to be inserted. If no special provisions are inserted, the shares are known as common shares, or perhaps more frequently as common stock. Common shares give to their holder the common or ordinary rights of a corporate owner, such as the right to vote on important matters of policy, the right to vote for directors, and the right to receive dividends to any amount that may be declared by the directors.[1]

How preferred shares are used. — Since the executives of a corporation have the task of raising capital as cheaply as possible, it is not surprising that they have devised many different types of contracts. One of the most frequently

[1] If a person is anxious to know all of the rights and privileges he possesses as a stockholder, he should read, not only his stock certificate, but also the charter and the by-laws of the corporation. In addition to these documents, the general corporation laws of the state in which the corporation is chartered may provide certain features of the contract.

used contracts for raising capital is that known as the preferred share. A typical use of preferred shares was made by our friends Black, Brown, and Green as their shoe business expanded. To that story we may now return.

Three years had passed since the business was incorporated. During these three years only common shares had been issued. In directors' meeting Black says, " Mr. President, three years ago I advocated incorporation so that we could raise additional capital and open two new stores. We have done so and succeeded admirably, as your report shows. We have made an average profit of $11.67 per share on our stock over the three years past, paying $6 per share cash dividends and " plowing under " the rest of the profits until now we are thoroughly established, have all bills paid and a good balance in the bank. I believe the time has come to move into larger fields. I believe we should establish a chain of retail shoe stores in this part of the state. With our organization we can supervise ten or twelve stores as effectively as we can the three we are now operating. To set up ten new stores will require about $45,000. We can spare $5,000 from what we have in the bank. I suggest we raise $40,000 by selling 400 shares of 7 per cent preferred stock at par, $100 per share. I have two reasons for recommending the use of preferred shares rather than common shares.

" In the first place, we can contract to make these preferred shares nonvoting shares, thereby assuring ourselves that we shall retain control of the company. If we issued 400 shares of common stock, it would make 900 shares outstanding in all, of which Brown, Green, and myself would hold 300, which would be less than a majority. I do not mind saying that I think we three should control this business, because we founded it and have been mainly responsible for its success. If we raise this money by nonvoting pre-

ferred shares, we shall insure ourselves control, for we shall continue to have 300 of the 500 shares of common stock.

" In the second place, by selling preferred stock we can increase the earnings on our common stock. We have been earning between $11 and $12 a year on our shares of common. If we sell more common stock and make the same profit on the new capital as we have made on the old, we shall earn but $11 or $12 profit per share. But if we raise the new capital by selling 7 per cent preferred shares and it earns $11 per share each year, we shall pay the preferred owners $7 of the $11 and have $4 left for ourselves as common stockholders. We shall be making money on their money, the only concession being that we let them have the preference over us in the earnings up to $7 per share." (Hence the name preferred stock.)

" I therefore move that we apply to the state authorities for permission to amend our charter authorizing an issue of 400 shares of preferred stock, of the par value of $100 each."

The discussion that followed brought out diverse opinions. One director was doubtful whether preferred shares carrying 7 per cent annual dividends would sell, in view of the fact that preferred stock of some of the best-known companies could be bought at prices yielding 7 per cent to the investor. To this Black replied that a local enterprise would appeal to local investors because they could see where their money was going. Another inquired whether the new shares should be made *cumulative* preferred, meaning that if the dividends were missed for one or more years they accumulate and must be made up later before the common stock could receive any dividends. It was agreed that since practically all preferred stock being issued in recent years was cumulative, theirs should be cumulative also. Green asked whether the stock was to be made redeemable and if so at what price. (Redeemable stock is stock that may be called in, or redeemed,

by the corporation.) Black argued that it should be made redeemable, because the company's future operations might be so profitable that the common stockholders would desire to apply some of the profits to retiring the preferred stock, thus clearing the way for all earnings to go to the common. It was agreed that the " call " or redemption price should be $110 per share, the $10 premium being an attractive feature to help sell the shares, as well as compensation to the shareholder for surrendering his investment, in case the shares were called in. After some further discussion the plan was adopted. Preferred shares financed the expansion of the corporation.

The contract may create other special kinds of shares. — While preferred stock is more frequently used than any other to supplement common stock, we do find other kinds.

If the management desires to create nonvoting stock, so that control of the company may be held by a certain group, another way to carry out such a policy is to create two classes of common stock, Class A and Class B shares, both classes exactly alike except that one class has no voting power while the other has exclusive voting power. If the desire is to raise funds by appealing to a class of investors who want shares that carry a marked preference over other shares, prior preferred shares may be issued, ranking ahead of preferred shares. To make preferred shares more attractive, they may be made *participating*, that is, participating with the common shares in dividends above a certain amount. A plan frequently used is to pay a given percentage (say 7 per cent) on the preferred, then the same percentage on common, and then to divide further dividends equally between the two.

Thus a variety of shares arise, carrying not only different names but different privileges, different rights, different powers. Each kind of share is a separate contract, binding upon the issuing corporation and upon the stockholder. And

each kind is in existence because a question of policy was settled in a certain way. In wrestling with his problems, the financial executive has become ingenious in devising various kinds of shares. He buys his capital on the best terms he can make.

Summary. — When a business incorporates, shares of stock are issued to identify the owners and to show what proportion of the ownership each has. Shares may be used to raise necessary capital, to pay individuals for services rendered, to pay dividends, and to be given as a bonus when other securities are sold. The contract sometimes provides that shares shall not have voting power. Even when voting power is given, the indifference of scattered stockholders generally results in lodging control in the hands of a key man, who is usually the president. Besides common shares, other kinds are issued having special privileges and special restrictions attached to them. These are created to accomplish certain purposes, such as the raising of funds without giving voting power, and the restricting of dividends so that the common shares may reap larger returns. The financial executive, in buying his capital, endeavors to gain as much as he can by conceding as little as possible.

QUESTIONS

1. Define or explain:
   - (*a*) Partnership
   - (*b*) Corporation
   - (*c*) Charter
   - (*d*) Shares of no-par value
   - (*e*) Bonus shares
   - (*f*) Proxy
2. Why are railroads usually run by corporations, whereas farms are usually run by individual owners?
3. How does a stock certificate differ from a share of stock?
4. In the case of Black, Brown, and Green, described in the foregoing chapter, their corporate ownership was divided into 500 shares of the par value of $100 each.

(*a*) Why did they create 500 shares rather than 5,000 shares?

(*b*) Why did they give the shares a par value at all?

(*c*) Why did they adopt $100 as par value?

5. In a study made of new common stocks issued by one hundred and thirty-six corporations between 1916 and 1921, it was found that the shares of sixty-two were no-par value. How do you explain the popularity of this kind of stock?

6. Why does the issue of additional stock by a going concern generally give rise to stockholders' "rights"? Why are some "rights" much more valuable than others?

7. Why do the promoters of a corporation usually pay themselves for services rendered with stock rather than with cash? Is there danger that they will pay themselves too much? Who would be injured if they pay themselves too much?

8. Why does a stock dividend generally reduce the market value of each share of stock? Why should the directors of a corporation ever desire to reduce the market value of the shares?

9. "In return for depriving the preferred stockholder of a right to vote, we shall give him precedence over the common stockholder in his dividends; we shall also give him precedence in return of his principal in case of dissolution of the company." Explain. Why should he be deprived of the right to vote? The right to vote for whom or for what?

10. Suppose you had to raise the necessary funds to launch a new corporation which was being formed to sink gas wells in West Virginia.

(*a*) Do you think you would use both preferred and common stock? Why?

(*b*) Would you give a par value to your stock? Why?

(*c*) Might it be necessary to use some of the common stock as a bonus to help sell the preferred, in case you used preferred? Explain why or why not.

(*d*) How about offering participating preferred shares?

(*e*) What would be your arguments to a person who was only mildly interested in your proposition?

11. A certain sugar-refining company has outstanding 7 per cent preferred stock to the amount of $50,000,000 par value. The dividends are cumulative and were paid regularly until April 1, 1921, but none have been paid since that date.

(*a*) How much money is needed annually to pay this dividend?

(*b*) What is the amount of the accumulated dividends to date?

(*c*) Assuming that profits being earned are small, what are the chances that the common stock will receive dividends in the near future?

12. Some corporations have sold convertible preferred shares, which are shares that may be turned into the company and converted into common shares if the holder so desires. The terms on which the conversion may take place are stated in the contract between the corporation and the preferred stockholder. For example, one company offers to allow its preferred stockholders to exchange their shares for common stock "share for share" at any time; another company gives the preferred the right to receive three shares of common for each share of preferred turned in, but the offer is open only until a certain date.

(*a*) Why are these convertible shares created?

(*b*) Under what circumstances would the preferred stockholders be likely to exercise their right of conversion?

(*c*) Is it possible that a share of common stock could be more valuable than a share of preferred stock in the same company? Why or why not?

13. If you were ambitious to become a member of the board of directors of a corporation, list the steps you would have to take to attain your objective.

14. What are some of the questions you would be considering if you were sitting in a meeting of the board of directors?

15. In order to give a minority group of stockholders representation on the board of directors, some states compel the corporations chartered in those states to provide for cumulative voting. Cumulative voting is a device by which any stockholder can concentrate all his votes for one man, instead of voting for as many different men as there are places to be filled on the board of directors; for example, if ten directors are to be elected and if a stockholder owns one hundred shares he may, under cumulative voting, cast ten times one hundred, or one thousand, votes for one man instead of casting one hundred votes for each of ten different men. What are the advantages of such a device?

16. Why is a small corporation likely to have a larger proportion of its stockholders participate in policy formation than a large corporation? May this hamper quick decisions? How may it be justified?

17. A corporation in which a relatively few persons own all of the stock and none of it is offered for sale, is called a *closed*, or *close*, corporation. One in which the public can buy shares is called an *open* corporation. Which type is likely to have the larger capital? Which is likely to enlist the greater personal interest of the stockholders? Why?

18. "The names of Ford, Edison, Schwab, Du Pont, Morgan, and many other captains of industry reveal the extent to which industrial power is concentrated. Individual stockholders are impotent; the industrial chief is all-powerful."

(*a*) Why is the individual stockholder said to be impotent?

(*b*) Why does a large corporation demand an industrial chief?

(*c*) What elements of danger do you see in the concentration of industrial power?

(*d*) Point out how such a key man is concerned with financial problems.

TOPICS FOR FURTHER STUDY

How Corporations Use Stocks:

Dewing, *Financial Policy of Corporations*, Rev. Ed., Vol. I, chap. II, III.
Lincoln, *Applied Business Finance*, chap. V.
Lough, *Business Finance*, chap. V.
Mead and Scholz, *Rudiments of Business Finance*, chap. V.
Meech, *Financial Administration*, chap. V.
McKinsey and Meech, *Controlling the Finances of a Business*, chap. XV.

CHAPTER X

HOW NOTES AND BONDS ARE USED

A. Policy of Borrowing Gives Rise to Notes
B. Certain Policies Call for the Use of Bonds
C. How Definite Kinds of Bonds Are Used

When a hatchet, a horse, or a cookbook is loaned, the owner expects to get back the identical article. Usually such loans are personal in nature, and made between friends. No written record is kept and collection of interest is never thought of.

In the case of money loans, however, conditions are different. One has a feeling that some kind of written memorandum is proper, while interest charged on such loans has come to be accepted without question. True, Jones may say to Gray, "Lend me ten till Saturday night," and neither of them makes any written record of it, or expects interest to to be paid. But most money loans are not of a personal, friendly nature; they are a matter of business, and in business we generally find records kept and charges made for service rendered.

A. Policy of Borrowing Gives Rise to Notes

(Notes as the evidence and record of loans; why notes are used; secured and unsecured notes; demand and time notes)

The record of a loan may be kept in various ways. — While some persons try to keep their records of loans in their heads, the human brain is subject to so many slips and errors

that nowadays we seldom charge it with that task. We prefer to put such records on paper. Another advantage, besides accuracy, in keeping records of loans on paper is that in case we have to go to law about the debt, a piece of paper is worth more as evidence than a human brain. Hence, records of loans are typically made nowadays in writing. Written records may be:

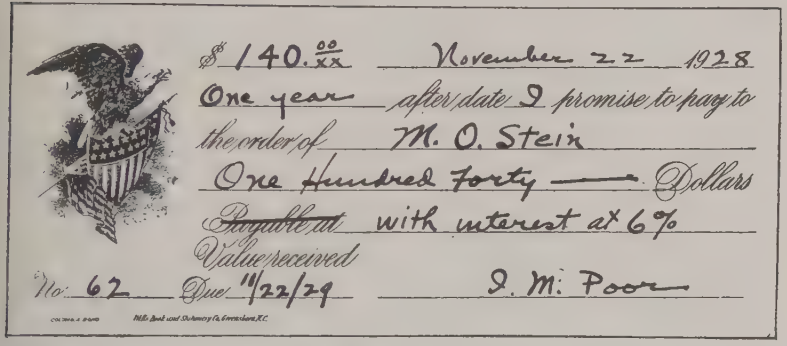
Memoranda. — A memorandum is not a formal promise to pay, but merely an informal reminder or acknowledgment. If Jones jots down in his notebook, "Borrowed $10 from Gray till pay day," he has made a memorandum; Gray may also jot down a memorandum or he may keep his record in some other way. When a person opens a deposit account in a bank, he generally receives a pass book, which is really a memorandum book, in which the teller jots down the amount of each deposit, thus acknowledging the debt of the bank to the depositor.

Book accounts. — When a merchant sells goods on credit, he is really making a loan to the buyer. When the sale is made, the seller keeps a record by means of a sales slip and an entry on his books. A copy of the sales slip is given the purchaser as a memorandum, while the store's copy is sent to the bookkeeping department, there to be entered on the books.

Promissory notes. — One of the most frequently used records of loans is the promissory note, a written promise to pay, signed by the borrower. The chief advantage of the promissory note over the book account or the memorandum is that a promissory note places in the hands of the lender the borrower's definite promise to repay. In case of dispute such a promise is better evidence than a book account or a memorandum. A note may be more promptly paid at maturity, too, for many persons will strain a point to pay their promissory notes when due, but will carelessly allow their

other debts to run on. They feel that a loan for which a note has been given is a more serious matter than one recorded in some other way.

Promissory notes vary in form all the way from a simple, scrawling promise to the most elaborate bond (for a bond, as we shall see, is only a form of promissory note).


$140.00/xx November 22 1928
One year after date I promise to pay to
the order of M. O. Stein
One Hundred Forty —— Dollars
Payable at with interest at 6%
Value received
No. 62 Due 11/22/29 I. M. Poor

Promissory Note

Notes may be used both in starting and in operating a business. — Notes, as we have seen, are an evidence of borrowed money. Enterprises, in starting, typically raise part of their needed capital from their owners and obtain part from creditors. The part obtained from creditors may be in the form of goods bought on credit, or it may be in the form of borrowed money. After an enterprise is started, the funds needed for running the business may come either from the operation of the business itself or from outside sources such as loans.

Why funds are borrowed by means of notes. — In the preceding chapter we observed how certain financial policies give rise to the issue of shares of stock. We may now observe how certain conditions give rise to borrowing by means of simple promissory notes.

When a temporary shortage of funds occurs, borrowing by means of a note usually results. The head of the family, running short of cash, usually borrows on his promissory note. When a business firm runs short of cash, the treasurer usually does likewise. As we have already noticed, most businesses find that their inflow of cash does not equal their outflow at certain times; hence borrowing results, giving rise to notes.

Notes also arise when funds of other persons are desired in order to make profits. Adams has his eye on a piece of real estate which he thinks will advance in value; he has only half as much cash as he needs to buy it, so he borrows the balance on his note. Baker sees an opportunity to make "good money" in the garage business, so he borrows part of the necessary capital on his promissory note. Carter decides to expand his barber shop to include a beauty parlor; he gives his note for the needed funds. The Eastern Dry Goods Company has a rare opportunity to buy at bargain prices a large consignment of oriental rugs; the treasurer applies to the bank for the funds, signing a note. Opportunity to make profits creates a demand for funds. If the enterprise has insufficient funds of its own, borrowing on notes usually results.

The borrower usually applies to the lender. — It occasionally happens that the lender seeks out the borrower, asking him to borrow some of the lender's funds. For example, banks sometimes call up certain of their customers asking them if they cannot use some of the surplus funds of the bank. But generally the borrower must take the initiative and apply for the loan. He may apply to a personal friend; he may apply to a broker who will in turn apply to a lender; he may apply to an institution that lends funds, such as those discussed later, in Part IV; but the responsibility for originating action usually rests upon the borrower.

When the borrower applies to the lender, it is then time for the lender to speak. And the lender generally has two important questions to ask, namely, "What security can you offer?" and, "For how long do you want the money?" These two questions may yield answers such as the following:

PROMISSORY NOTES MAY BE

So far as security is concerned	So far as time is concerned
1. *Unsecured*	1. *Payable on demand*
2. *Secured*, by	2. *Payable at a definite time*
(*a*) Endorsers	
(*b*) Mortgage	
(*c*) Collateral	

Notes may be unsecured or secured. — If the lender is satisfied that the promise of the borrower is sufficient security, he will lend the money on the basis of the borrower's credit alone. Such a loan is known as an unsecured loan, while the note is known as single-name paper, since it has only the borrower's signature on it. Unsecured loans do not necessarily entail more risk than secured loans, for the borrower's name on the note may be ample security. Many of the loans made by banks to business firms are unsecured loans, as are many of our outstanding bond issues.

Secured notes are of three types, those secured by endorsers, by mortgage, and by collateral. The lender may insist that one or more persons sign or endorse the note with the borrower, thus making the note two-name paper, or three-name paper, or more, as the case may be. Each additional endorser adds to the security of the loan, since, if one cannot pay, the lender may proceed against any or all of the others. The principle of unlimited liability applies to signers of promissory notes, all of their property being liable for the payment of their notes.

Another form of security is by a mortgage on property.[1] Not only is real estate commonly pledged as security for notes, but also personal property, such as furniture, automobiles, cattle, and growing crops. Mortgages on personal property are known as chattel mortgages. Since personal property does not remain in existence as long as real estate, notes secured by chattel mortgage mature, typically, in a shorter time than those secured by mortgage on real estate.

A note secured by paper evidences of wealth, such as stocks, bonds, notes, and drafts, is known as a collateral note. As society develops the wider use of credit, and breaks up the ownership of businesses into shares, collateral becomes more common, and hence more widely used as security for loans.

Notes may be payable on demand or at a definite time. — In the case of notes payable on demand, the lender may demand payment and the borrower may make payment at any time. Demand notes generally run until the borrower pays them. Probably the reason for this is that the lender, believing his money to be safe, is glad to be spared the trouble of reinvesting it frequently. An important form of demand loans is the " call " loan used in the New York money market (see page 407). Here loans running into the hundreds of millions are made and terminated daily, lenders calling for payment when they need the funds, borrowers terminating their loans when they have surplus funds.

The uncertainty regarding the time of repayment of de-

[1] A mortgage is a document which transfers the ownership of property conditionally. The term comes from the Latin and means "dead pledge," or perhaps "sleeping pledge." If the borrower lives up to his agreement, making his payments of interest and principal when due, his pledge sleeps on and when the debt is paid the pledge is revoked or canceled. On the other hand, if the borrower does not live up to his agreement, failing to make his payments when due, his pledge wakes up and goes into effect, which means that he loses his property. The property is thereupon sold to pay the debt.

mand loans causes most loan agreements to be made for a definite time. The borrower knows just when he must pay (or renew) his loan, while the lender knows when he may expect his money. Another advantage of the definite time loan (and one which banks make eager use of) is that it permits interest to be calculated and deducted in advance, something that cannot be done with the demand loan, since the time it will run is not known.

In general, financial executives use simple promissory notes when their policy is to borrow for a relatively short period of time. This instrument aids, therefore, in carrying on credit operations, and in shifting funds from lenders to borrowers. In so doing it helps business enterprises produce the goods and the services demanded by modern society.

B. Certain Policies Call for the Use of Bonds

(The nature of a bond contract; bonds a cheap method of raising capital; significance of earning power in judging a bond)

What is a bond? — When a government or a corporation desires to borrow a considerable sum of money for a long term of years, it does so by issuing bonds. A bond is, therefore, a promissory note, but it differs from the ordinary note in the fact that a bond is usually a long, formal, printed contract containing the following:

1. A promise to pay at a certain, definite, future date the principal or par value of the bond, signed by the government or corporation officials.
2. A promise to pay in the meantime a certain rate of interest on this principal or par value.
3. The time and place of the interest payments.
4. A brief summary of the security, if any, behind the bond.

In most cases the contract between the government or corporation borrowing the money and the bondholders lend-

Courtesy Halsey, Stuart & Co.

BONDS ARE ISSUED IN CONVENIENT DENOMINATIONS, SUCH AS $100, $500, $1,000

Interest may be payable by means of coupons, the holder cutting off and presenting each coupon as it falls due.

ing the money is too lengthy to be printed in full on the bond. Accordingly, it is printed as a separate document, sometimes known as an "indenture." Copies of the indenture may be obtained by those who are considering buying the bonds, and who want to know exactly all of the terms of the agreement.

Since the bondholders may live in widely scattered communities and could not, therefore, act together effectively in case the corporation failed to keep its promises, the contract usually provides for a trustee. The trustee, usually a trust company, sees that the bonds are properly issued, and holds the title to any property that may be pledged as security for the bonds (see pages 295–297). Thus the contract becomes a three-cornered one, involving rights and duties of the corporation, the trustee, and the bondholders.

Privileges of a bondholder. — As a general rule, a bondholder has no voice in the management of the corporation. He supplies part of the necessary funds, but yet he cannot vote for members of the board of directors who are responsible for handling his funds. In other words, he is not a part owner of the corporation, but is a *creditor*, since he has loaned money to the company. Creditors have the advantage of ranking ahead of owners when it comes to the payment of their claims. Under this rule of law, bondholders have first claim upon the corporation's earnings for the payment of their interest, and in case of the dissolution of the corporation, their claims for payment of their principal take precedence over those of the owners. The stockholders really say to the bondholders, "If you will lend us your funds and keep hands off the management of the concern, we will allow you to take your interest out of the earnings before we take anything." If the corporation fails to live up to the promises made to the bondholders, it is bankrupt. In that event

the bondholders ask the appropriate court to appoint a receiver to take charge of the corporation. This action, which may also happen if any borrower defaults on his promissory note, takes away the control from the stockholders, directors, and officers, and lodges it in the hands of a representative of the court, who must protect the interests of all parties concerned. Naturally the executives of a corporation feel that the greatest drawback about borrowing money is this risk of not being able to repay, and therefore of the company's going into bankruptcy.

Bonds are a cheap method of raising long-time funds. — The recent construction of a hydroelectric power plant on a river in the South illustrates a typical use of bonds. The estimated cost of the plant and transmission lines was, in round numbers, $8,000,000. The executives knew that this capital would be tied up for many years, perhaps indefinitely, because it would be used to buy the adjacent land, construct the dam and power house, and install the equipment. Since the capital was to be " sunk " for a long time, the executives realized that the money should be raised by instruments running for a long time. Short-time instruments, such as simple promissory notes, would not be appropriate because they would mature before the corporation could earn enough to pay them off. Instruments running for a long time being called for, the executives used the only two instruments available — *shares of stock* and *bonds*. Shares of stock were used for part of the capital because shares would never fall due, and hence the owners could never throw the company into bankruptcy for nonpayment. Furthermore, dividends on the shares were not promised in advance; they would be paid only if profits were earned and if the directors saw fit to order them paid.

The executives, having decided to raise part of the capital

by means of bonds, had to consider next how to make the bonds attractive to investors. This meant convincing investors, or rather the bankers who were to market the bonds to investors, that the bonds would prove safe and profitable.[1] To prove this, careful estimates of the earning power of the new

Courtesy Alabama Power Company

A Typical Use of Bonds

Structures like these are usually financed partly by sale of stock, partly by bonds, and partly out of surplus earnings of the company.

plant had to be made. Engineers estimated the amount of power that would be produced by the plant and the price at which they could sell it. From these factors they were able to compute the gross earnings. From gross earnings they subtracted liberal allowances for operating expenses, depreciation, and taxes, thus giving the net income avail-

[1] The marketing of bonds by investment bankers is discussed in Chapter XVI.

able for bond interest and profits. Their figures showed that if $4,000,000 par value of bonds were sold, bearing 5 per cent interest annually, the interest would amount to $200,000 a year, while the net income available to pay this interest would be about $425,000 a year. There would also be a wide margin of safety protecting the principal of the bonds, since the plant would be valued at $8,000,000 while the bonds would amount to only $4,000,000. These margins of safety for interest and principal convinced the bankers that the bonds would be a good investment to recommend to their customers. When the deal was completed and the bankers had bought the bonds, the president and treasurer of the company computed the cost of the capital. The charge made by the bankers for disposing of the bonds, added to the 5 per cent annual interest, made the capital cost the corporation about $6\frac{1}{2}$ per cent a year for the thirty years the bonds were outstanding. Since it was estimated that the capital would earn 9 to 10 per cent for the corporation, the executives congratulated themselves on having formulated a wise and profitable policy.

In the foregoing case the electric power company had to offer 5 per cent interest on its bonds to tempt investors to buy them. The condition of the bond market and the risk involved in the bond issue determine this rate. The safer the bond, the lower the rate of interest may be on the bond. For example, the United States government may be able to borrow money through bonds by offering an interest rate of $3\frac{1}{4}$ per cent a year, the State of New York may have to pay 4 per cent, the Union Pacific Railroad $4\frac{1}{2}$ per cent, an electric company 5 per cent, and so on. The interest rate expresses the degree of risk involved.

Bonds are sometimes the only instrument that can be used. — When the government (federal, state, or local) decides to

issue some kind of securities, it is always bonds, since our governments do not issue stocks.[1] Then, too, there are particular times when bonds are the only instrument that can be sold advantageously by business firms. Such is usually the case, for example, when industries are in a state of depression. Depression means little or no profits; little or no profits mean that shares of stock are not attractive to investors. If stocks are not attractive, and some kind of securities must be sold, bonds may have to be used. It becomes a question, not of what the corporate official would prefer, but of what investors will buy.

For long-time funds, therefore, the instruments offering themselves are stocks and bonds. Stocks are chosen if officials desire to issue that which involves the least risk to the corporation. Bonds are chosen if they desire to get the funds at a somewhat lower cost than stocks, or if market conditions are such that bonds only can be sold. But bonds, unlike stocks, carry with them the danger of bankruptcy.

C. How Definite Kinds of Bonds Are Used

(Questions involving rate of interest; security pledged; time the bonds shall run; method of maturity; repayment plan; form of bonds; special privileges)

Assuming that the decision is to issue bonds, the next question is: What kind of bonds shall be issued? This is a rather complicated matter, because as a rule a borrowing firm is not free to issue any kind of bond it prefers. It must offer the kind that investors will buy. Investors are trying to sell their money as advantageously as possible, while the borrower is trying to buy it as advantageously as possible. The result is a compromise, neither investors nor corporate offi-

[1] The term "bonds" is here used in a broad sense to include notes, certificates of indebtedness, and other government borrowing instruments.

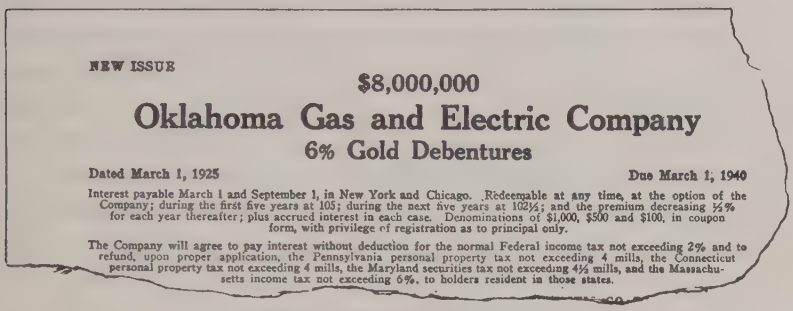
cials getting all they would like. This can be illustrated by the rate of interest promised on the bonds. The borrower would like to get the money at zero rate of interest, but of course investors will not lend money on those terms. On the other hand, investors would like to get a very high rate on their money (and still invest it safely), but corporations and governments will not pay it. So a compromise results, and in working out the compromise investment bankers are invaluable aids. As will be shown in the discussion of bond houses (Chapter XVI), the investment bankers are in close touch with market conditions, and they are trying to please both investors and corporate officials who are issuing the bonds. They can advise the rate of interest the bonds should carry, as well as other important details.

In addition to the rate of interest, there are at least six other important questions to decide in working out a bond issue. They are the following:

1. Shall security be pledged for the bonds?
2. For how long shall the bonds run?
3. What method of maturity shall be used?
4. What repayment plan shall be adopted?
5. In what form shall the bonds be issued?
6. What special privileges shall be included?

1. Shall security be pledged for the bonds? — Investors as a rule prefer that specific security be pledged for corporation bonds, in order that they may have special protection in case the corporation fails. The corporation on the other hand would prefer to borrow without pledging any of its property. If the corporation gains its point and no specific property is pledged to secure the bonds, such bonds are called "debenture bonds" or simply "debentures." Debentures rest simply upon the earnings of the company. Most government bonds are debentures. Investors rarely demand that

any specific assets of the government, such as government land and buildings, be pledged to secure the principal of the loan. However, when it comes to business corporations



NEW ISSUE

$8,000,000

Oklahoma Gas and Electric Company

6% Gold Debentures

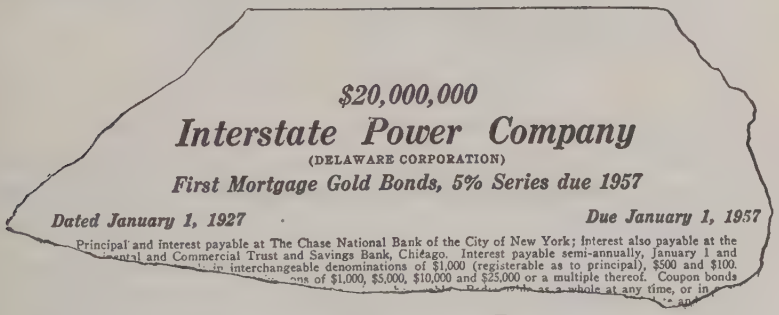
Dated March 1, 1925 — Due March 1, 1940

Interest payable March 1 and September 1, in New York and Chicago. Redeemable at any time, at the option of the Company; during the first five years at 105; during the next five years at 102½; and the premium decreasing ½% for each year thereafter; plus accrued interest in each case. Denominations of $1,000, $500 and $100, in coupon form, with privilege of registration as to principal only.

The Company will agree to pay interest without deduction for the normal Federal income tax not exceeding 2% and to refund, upon proper application, the Pennsylvania personal property tax not exceeding 4 mills, the Connecticut personal property tax not exceeding 4 mills, the Maryland securities tax not exceeding 4½ mills, and the Massachusetts income tax not exceeding 6%, to holders resident in those states.

EXAMPLE OF DEBENTURE BOND

issuing bonds, the American investor usually prefers, not debentures, but secured bonds. Secured bonds are either *mortgage* bonds, secured by real estate, or *collateral trust* bonds, secured by financial instruments, such as stocks and bonds owned by the corporation.



$20,000,000

Interstate Power Company

(DELAWARE CORPORATION)

First Mortgage Gold Bonds, 5% Series due 1957

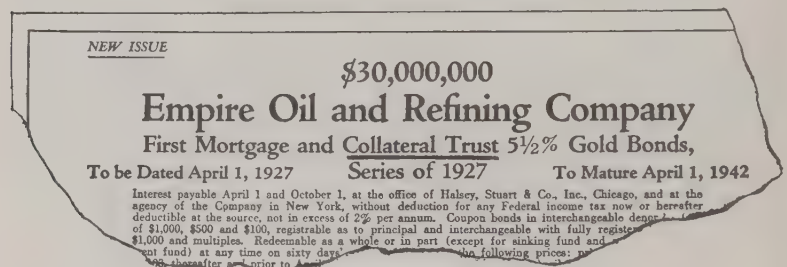
Dated January 1, 1927 — *Due January 1, 1957*

Principal and interest payable at The Chase National Bank of the City of New York; interest also payable at the ...ental and Commercial Trust and Savings Bank, Chicago. Interest payable semi-annually, January 1 and ... in interchangeable denominations of $1,000 (registerable as to principal), $500 and $100. ... of $1,000, $5,000, $10,000 and $25,000 or a multiple thereof. Coupon bonds ... as a whole at any time, or in ... and

EXAMPLE OF MORTGAGE BOND

Mortgage bonds. — The commonest type of bond found in America is the mortgage bond. Just as an individual's simple promissory note may be secured by a mortgage (see page 166), so a corporation's bond may be secured likewise.

If the corporation defaults on its promises, the bondholders, acting through the trustee and in accordance with the terms of their contract or indenture, may have the mortgaged property sold to satisfy their claims. The greater the difference between the value of the mortgaged property and the amount of bonds issued, the better for the bondholders. In the case of the hydroelectric plant, described on page 170, the mortgaged property was valued as $8,000,000 while $4,000,000 of bonds were sold; this would ordinarily be considered ample security, for the value of the property would have to shrink one half or more to cause a loss to the bondholders in case of foreclosure.



NEW ISSUE

$30,000,000

Empire Oil and Refining Company

First Mortgage and Collateral Trust 5½% Gold Bonds,

To be Dated April 1, 1927 **Series of 1927** **To Mature April 1, 1942**

Interest payable April 1 and October 1, at the office of Halsey, Stuart & Co., Inc., Chicago, and at the agency of the Company in New York, without deduction for any Federal income tax now or hereafter deductible at the source, not in excess of 2% per annum. Coupon bonds in interchangeable denominations of $1,000, $500 and $100, registrable as to principal and interchangeable with fully registered bonds of $1,000 and multiples. Redeemable as a whole or in part (except for sinking fund and [illegible] ent fund) at any time on sixty days' [illegible] the following prices: [illegible] [illegible] thereafter and prior to April

EXAMPLE OF COLLATERAL TRUST BOND

Collateral trust bonds. — Just as an individual's simple promissory note may be secured by collateral (see page 166), so a corporation may pledge valuable securities, such as stocks or bonds, which it owns. These, of course, are stocks and bonds issued by other corporations. When collateral is pledged as security for a corporation's bonds, the collateral is placed in trust in the hands of a trustee; hence the name "collateral trust" bonds. This type of bond is rather common in the railroad and public utility fields. For example, a few years ago the American Telephone and Telegraph Company desired additional capital with which to expand its busi-

ness. In order to control and consolidate certain telephone companies in various parts of the country it had purchased shares of stock of these various companies. It accordingly held these shares among its assets. The officials of the company decided to use some of these shares as security for a bond issue. The bonds were called "American Telephone and Telegraph Company Collateral Trust 5's, 1946," meaning they were secured by collateral (stocks in this case), bore 5 per cent interest, and matured in 1946. In case the company defaults on interest payments, the bondholders can have the trustee seize the stocks pledged as collateral security, sell them, and take the money as repayment of their loan.

2. **For how long shall the bonds run?** — Our next question concerns the duration of the loan. The number of years that the bonds shall run depends mainly on two considerations: the length of time the money is needed and the condition of the bond market.

The length of time the borrower needs the money and will remain in business clearly affects the time the bonds shall run. If the business is one of stability and of indefinite duration, as for example a railroad or a public service company, it may safely borrow for a long term of years.[1]

On the contrary, businesses or projects of short duration must confine their borrowing to short terms. For example, real estate companies, issuing bonds to help finance buildings, must give their bonds a rather short life, say ten or fifteen years, so that investors will have their loan repaid before the building becomes dilapidated and out-of-date.

Market conditions also enter in. A corporation might be

[1] A few companies have issued bonds which amount to almost a perpetual loan. West Shore Railroad has a bond issue maturing in the year 2361, while the first mortgage bonds of the Commercial Cable Company mature in 2397. Some English corporations have issued perpetual bonds, that is, without a maturity date.

able to borrow for a long time, but due to market conditions interest rates might be quite high at the time. It would clearly be better to borrow for a short time, planning to issue long-term bonds later when interest rates fell.

3. **What method of maturity shall be used?** — A borrower may have a certain number of his bonds fall due each year, thus paying off a part of his debt annually, or he may have them all fall due at one time, say at the end of twenty years. The former plan would give *serial* bonds, the latter plan single maturity bonds. Serial bonds, as the name suggests, are bonds that mature in series, one series say in 1930, another in 1931, another in 1932, and so on. This type of bond is popular with corporations having a steady income which they desire to apply to reduction of their debt. Cities commonly issue serial bonds to pay for paving of streets. As the property owners along the street pay their annual paving assessment to the city, the city can apply the money to paying off its bonds. Similarly, real estate bonds issued to help pay for a new building are usually serial bonds, since they can be retired year by year from the rentals of the building (see illustration on opposite page).

On the other hand, some corporations do not care to obligate themselves to pay off a definite amount of debt each year, perhaps because their income is somewhat irregular, or because they do not plan to pay off their debt at all. Such conditions give rise to bonds with a single maturity date.

4. **What repayment plan shall be adopted?** — When bonds have a single maturity date, repayment must be made all at once. To take care of this situation there are two possibilities: a sinking fund may be created; the bonds may be refunded.

A sinking fund may be created. — A sinking fund is a sum of money periodically set aside out of income to pay off a

debt when it falls due. It distributes the burden over a period of time, thus relieving the corporation of the necessity of finding all of the money in the last year of the life of the bonds. As fast as the sinking fund is available it may be applied to buying up some of the outstanding bonds, or it may be allowed to accumulate at interest until the maturity year and

We Own and Offer

$4,000,000

ADAMS-FRANKLIN BUILDING

A Downtown Chicago Office Building

First Mortgage Fee 6¼% Serial Gold Bonds

The serial maturities together with the price and yield at which the bonds of each maturity are offered, subject to prior sale and change in price, are set forth in the table below:

Maturity	Principal Payment	Price	Yield %	Maturity	Principal Payment	Price	Yield %
October 1, 1930	$26,000	100.49	6.10	October 1, 1936	$110,000	100.00	6.25
October 1, 1931	39,000	100.20	6.20	October 1, 1937	116,000	100.00	6.25
October 1, 1932	52,000	100.00	6.25	October 1, 1938	123,000	100.00	6.25
October 1, 1933	56,000	100.00	6.25	October 1, 1939	130,000	100.00	6.25
October 1, 1934	59,000	100.00	6.25	October 1, 1940	138,000	100.00	6.25
October 1, 1935	58,000	100.00	6.25	October 1, 1941	*3,093,000	100.00	6.25

*Of which $138,000 is covered by monthly deposits, leaving $2,955,000 to be paid on October 1, 1941.

SERIAL BONDS

then be used for repayment. The exact amount of the sinking fund and how it shall be handled are carefully stated in the contract, or indenture. Sometimes the sinking fund is called the "amortization fund," and the process of using the fund is referred to as "amortizing the debt."

The bonds may be refunded. — If the corporation does not intend to get out of debt at all, it will refund its bonds. This means that they will sell a new bond issue and use the proceeds to pay off the old, maturing bonds. The holders of the old bonds are usually offered the privilege of exchanging their

bonds for the new ones, but may have the cash if they prefer. This policy of issuing " refunding bonds " is widely adopted by our public utility corporations, such as railroads, gas, electric light, and telephone companies. The policy of never paying off a debt seems at first thought dangerous. However, if the public will need railroads, telephones, electricity, and artificial gas for an indefinite period in the future, why should not these corporations employ borrowed funds continuously in their business?

A combination of these two plans may also be used, whereby a sinking fund is used to retire a part of the debt, while the balance is refunded at maturity.

5. **In what form shall the bonds be issued?** — Bonds may be either *registered* or *coupon.* If the owner's name is placed on the bond and registered on the books of the corporation, so that the corporation knows who the owner is and therefore to whom to mail a check for the interest, it is a " registered " bond. On the other hand, a " coupon " bond is made out promising to pay *the bearer* the money, and a sheet of coupons is attached, one for each semiannual interest payment (see illustration page 168).

Registered bonds are safer, inasmuch as the owner is protected in case the bond is lost or stolen ; the finder or the thief cannot make it his own property. The rightful owner, by notifying the corporation of the loss or theft, can prevent a transfer. Coupon bonds are more convenient in case the owner desires to sell his bond, for the corporation need not be notified of the sale. Mere delivery of the bond to the purchaser is sufficient to transfer the ownership. They are riskier to handle, however, for if a coupon bond is lost or stolen and then sold to some innocent purchaser, the purchaser becomes, under our law, the true owner of the bond.

A bond may be registered as to principal but the interest

may be payable by means of coupons. Such a bond is called a " registered coupon " bond.

6. **What special privileges should be included?**— Special privileges in bond contracts are of two kinds: privileges given to the bondholders; privileges reserved to the corporation.

Some bonds grant no special privileges at all to the bondholders, the contract simply allowing them to collect their interest and principal. However, many bond contracts carry special privileges. One privilege sometimes found is the *convertible* feature, which allows the bondholder to present his bond to the corporation to be converted into another security, usually shares of stock. This privilege generally adds value to a bond, since the stock may be worth more than the bond, due to large profits and high dividends being paid on the stock.

UNITED DRUG COMPANY.

NOTICE OF REDEMPTION OF 20-YEAR 6% GOLD BONDS DATED OCTOBER 15, 1924.

NOTICE IS HEREBY GIVEN that, pursuant to the provisions of its Indenture of Trust dated October 15, 924, to The Chase National Bank of the City of New York, Trustee, UNITED DRUG COMPANY has elected to redeem and retire and pay off on April 15, 1928, all of its 20-year 6% Gold Bonds issued and then outstanding under said Indenture of Trust.

Accordingly, on April 15, 1928, there will become due and payable upon each such 20-year 6% Gold Bond at the principal office of the Trustee The Chase National Bank of the City of New York, No. 57 Broadway, in the Borough of Manhattan, City and State of New York, 107½% of the principal amount thereof and accrued interest to such date.

From and after April 15, 1928, interest on the said Bonds shall cease and the coupons for interest maturing subsequent to that date shall be void. Bonds when surrendered for redemption should have attached all coupons maturing subsequent to April 15, 1928.

UNITED DRUG COMPANY,
J. A. GALVIN, Treasurer.

Dated: February 15, 1928.

DIVIDENDS

BONDS CALLED IN BY THE CORPORATION

Another privilege sometimes granted to the bondholder is that of being relieved of taxes on his bond. Tax exemption can be granted only by the government. Business corporations may agree, however, to assume part or all of the tax levied on their bondholders. Some companies offer to pay a part of the income tax in case the bondholder is liable for

such a tax on his bond interest. Some of our states have a light tax, such as four mills on the dollar, on certain forms of personal property, such as bonds. The corporation may agree to pay this personal property tax for the owner (see, for example, the illustration on page 175). Bond owners should always investigate the privileges accompanying their bonds, so as to be ready to take advantage of such opportunities.

The principal privilege reserved to the corporation is that of calling in, or redeeming, its bonds before maturity. If a corporation makes unexpectedly large profits, it might want to apply them to paying off its bonds before they are due. If the bonds are callable, the corporation may do so. Another reason for making bonds callable is to take advantage of a decline in the market rate of interest. For example, a certain corporation issued bonds in 1923 bearing 7 per cent interest. By 1928 that corporation could, and did, issue bonds bearing 5 per cent interest, calling in the old bonds and paying them off from the proceeds of the new issue. The company saved 2 per cent a year thereafter.

Thus, in working out policies, executives have created an almost infinite variety of bonds. The table on the next page shows the main types of bonds, classified according to five tests.

Summary. — A note is a written promise to pay, an evidence of money borrowed. A bond is simply a formal, long-time note. Notes and bonds give to their holders the position of a creditor with the right of throwing the borrower into bankruptcy in case of failure to pay interest or principal. When a corporation has the necessary earning power and security to issue bonds, this method of raising funds is usually cheaper than selling shares of stock, although it is somewhat more risky. Corporate officials and bond dealers in wrestling with their problems of management have created a great va-

BONDS CLASSIFIED ACCORDING TO

I. Who promises to pay
   - A. Governments
     - Foreign bonds
     - United States bonds
     - State bonds
     - County bonds
     - City bonds
     - School-district bonds
   - B. Corporations
     - Transportation bonds
     - Public-utility bonds
     - Industrial bonds
     - Real-estate bonds

II. Security
   - A. Unsecured (debentures)
   - B. Secured
     - By guarantee of an individual or another corporation
     - By mortgage on real estate or personal property
     - By collateral, usually stocks or bonds

III. Repayment plan
   - A. Serial
   - B. Sinking fund

IV. Payment of interest
   - A. Payment only if earned
     - Adjustment bonds
     - Income bonds
   - B. Payment promised unconditionally

V. Evidence of ownership
   - A. Registered bonds
   - B. Coupon bonds

riety of bonds, whose true nature can be discovered only by examining the contract. The chief differences relate to the security behind the bonds, the time and method of maturity, the plan of repayment, and the special privileges attached to the contract.

QUESTIONS

1. Define or explain:
   - (*a*) Book account
   - (*b*) Demand note
   - (*c*) Two-name paper
   - (*d*) Serial bonds
   - (*e*) Convertible bonds
   - (*f*) Debentures
   - (*g*) Refunding bond
   - (*h*) Registered bond
   - (*i*) Indenture
   - (*j*) Collateral trust bond
   - (*k*) Sinking fund

2. Why is it desirable (*a*) for the lender, and (*b*) for the borrower, to have a written record of a loan?

3. Why would it not be feasible for a department store to require customers buying on credit to give their promissory notes? What credit instrument is used in such cases?

4. If a merchant borrows $40,000 a year from banks, paying 6 per cent for the loans, and makes the money earn 10 per cent a year in his business, how much profit a year is he making on the bank's money? Why does he not borrow all his capital in this way?

5. What is meant by the statement, "The banker offered to lend me the money if I could get some one to go on my note for me"? Why should the banker require this?

6. City bankers making collateral loans carefully watch the changing prices of stocks and bonds, even though they own none themselves. Why?

7. If a demand loan means that the lender can get his money whenever he wants it, why are not all loans made demand loans?

8. Why do some corporations issue bonds while others do not?

9. "When in doubt look up the indenture." Explain.

10. "Bonds can sometimes be sold when stocks cannot be sold." Explain.

11. "Bonds entail greater risk for the corporation but are safer for the investor; stocks are safer for the corporation but more risky for the investor." Why is this true?

12. "The common stock of some companies is a safer investment than the mortgage bonds of certain other companies." How can this be true?

13. Suppose a corporation has the following capitalization:

First mortgage 6 per cent bonds	$750,000
7 per cent preferred stock	500,000
Common stock, par value	500,000

Suppose this corporation has annual net profits (after expenses are paid) amounting to $90,000. Apportion it between the bondholders and the

stockholders. Suppose the corporation had promised to set aside a sinking fund of $20,000 annually, how would the $90,000 be apportioned?

14. Check the appropriate answer in each space below:

	Bonds	*Common stock*	*Preferred stock*
Holder is	Owner in corporation —— Creditor	Owner in corporation —— Creditor	Owner —— Creditor
Income or returns called	Interest —— Dividends	Interest —— Dividends	Interest —— Dividends
Amount of returns is	Variable —— Fixed	Variable —— Fixed	Variable —— Fixed
Holder ordinarily has	Voting power —— No voting power	Voting power —— No voting power	Voting power —— No voting power
Investment has	Maturity date —— No maturity date	Maturity date —— No maturity date	Maturity date —— No maturity date

15. In England debentures are the common type of corporation bonds. The English argue that earnings are the true test and security of a bond, so why not recognize the fact and make the bonds debentures? The American investor prefers the mortgage bond, arguing that in case of failure, the mortgage bondholder can protect himself by seizing and selling the property mortgaged. With which do you agree and why?

16. A prominent American corporation has both mortgage bonds and debentures outstanding. The first mortgage bonds, due in 1947, bearing 5 per cent interest, were selling recently at about 96 (that is, $96 for a $100 bond, or $960 for a $1,000 bond). The debentures due in 1932, bearing $7\frac{1}{2}$ per cent interest, were selling at the same time at about 104 (that is, $1,040 for a $1,000 bond). Why should the debenture sell for more than the first mortgage bond? Considering the price, the interest rate, and the security of the two, which would you rather own?

17. Suppose a corporation has issued $2,000,000 worth of 5 per cent collateral trust bonds, secured by the following collateral:

$1,000,000 of 6 per cent mortgage bonds.

$1,500,000 of common stock paying at present 5 per cent dividends.

(*a*) How much income does the collateral yield?

(*b*) Does this income take care of the interest on the outstanding collateral trust bonds?

(*c*) What would happen if the common stock held as collateral ceased to pay dividends? Would the collateral-trust bondholders necessarily lose anything? Why, or why not?

18. If you were preparing a bond issue for an automobile manufacturing company that had no bonds outstanding, do you think it would be to the best interests of your company to:

(*a*) Issue mortgage bonds or debentures?

(*b*) Have your bonds mature serially or at one time?

(*c*) Create a sinking fund to retire your bonds or plan to refund them?

(*d*) Make your bonds convertible into stock?

(*e*) Reserve the right to redeem the bonds before maturity?

Justify your decision in each case; then point out how some of your preferences might interfere with the ready sale of your bonds.

19. In the preceding case, why would you have very little to say regarding the rate of interest your bonds would carry? Who would have anything to say about this important matter?

20. You would need to issue some of your bonds in denominations of $1,000, some of $500, and probably some of $100. How would you know how many of each to issue?

21. "A coupon bond for easy transferability, a registered bond for permanent holding." Explain why.

22. "A bondholder supplies capital to a corporation and therefore should have some voice in management." "A bondholder should keep his hands off the management, since he is a creditor and his claims rank ahead of those of the stockholder. He should be satisfied with this protection." With which argument do you agree?

TOPICS FOR FURTHER STUDY

1. How Notes Are Used:

Dewey and Shugrue, *Banking and Credit*, chaps. XIII, XIV.
Holdsworth, *Money and Banking*, chap. XVI.
Moulton, *Financial Organization*, Revised Edition, pp. 356–382.

2. Bonds as a Device to Raise Funds:

Dewing, *Financial Policy of Corporations*, Revised Edition, Vol. I, chaps. IV–VII.

Lincoln, *Applied Business Finance*, chap. VI.

Mead and Scholtz, *Rudiments of Business Finance*, chap. VI.

CHAPTER XI

HOW DRAFTS ARE USED

A. Policy of Ordering to Pay Gives Rise to Drafts
B. Time Drafts Normally Become Acceptances

The promissory note, considered in the previous chapter, is signed by the debtor and then passes to the creditor. The draft, which we are now to consider, is first signed by the creditor, and then passes to the debtor. Since it originates with the creditor, it *orders* the debtor to pay the money. Hence a draft is an order to pay money.

A. Policy of Ordering to Pay Gives Rise to Drafts

(Checks and money orders; commercial drafts with bill of lading attached)

Checks are an important form of draft. — A check, as we have seen (page 126), is a written order on a bank to pay the sum named from the depositor's account. Due to their convenience, economy, and safety, checks are the most widely used financial instrument in society to-day. Their advantages may be seen in the case of a New Yorker who owes a firm in Portland, Oregon, let us say, $46,892.77. Without checks or something similar, he would have to assemble and count that much actual money, pack it, address and insure it, and forward it by express. As it is, a few strokes of the pen and a letter dropped in the mail settle it.

In some cases a single check may be used to settle several debts. For example, an employer owes a mechanic $35 in

wages; the mechanic owes his grocer $23. The employer writes a check ordering his bank to pay the mechanic $35. The mechanic indorses the check, hands it to the grocer, and receives $12 in cash together with a receipt for his grocery bill. The one check has settled two debts.

Checks are safer to handle than money. A person having a large number of bills to pay would find it dangerous, as well as inconvenient, to carry the necessary cash about with him. Payment by check relieves him of these risks, while the canceled checks, when returned to him by the bank, prove that the bill has been paid.

A check is, likewise, safer than money for the person receiving it. Before a check has been indorsed, it is good only in the hands of the one to whom it is made payable. A thief or a finder cannot cash it unless, perchance, he forges the name of the proper party and persuades some one to pay it. (Forgery is a serious crime in every country.) Except in the case of checks made payable to the bearer, which do not need to be indorsed, indorsement is necessary in order to transfer the ownership of a check to some one else, even to a bank. Indorsements are usually made by writing or stamping one's name on the reverse side of the instrument. There are three kinds of indorsement in common use: blank indorsement, special indorsement, and restrictive indorsement. If the person owning the check indorses *in blank*, he does not specify any party to whom the money is to be paid or any restriction on payment. Blank indorsement makes the check payable to bearer good in the hands of any one holding it. It involves, therefore, considerable risk, for it may fall into the hands of some one for whom it is not intended. A person may avoid this risk by indorsing *specially*, or by indorsing *restrictively*. A *special* indorsement specifies the one to whom the owner wishes payment made. A *restrictive* indorsement

restricts the further use of the check to whatever purpose is stated, usually to deposit in some bank. Business firms usually indorse their checks restrictively, so as to reduce danger of theft or other dishonesty.

SAMPLE INDORSEMENTS

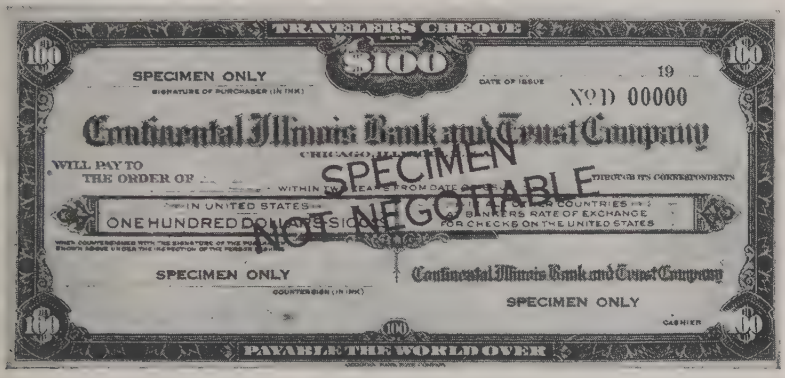
S. W. Brooks	Pay to order of Wells Grocery Co. S. W. Brooks	For deposit in First National Bank S. W. Brooks
Blank indorsement	Special indorsement	Restrictive indorsement

The convenience and safety of checks have caused their use to extend until to-day it is estimated that about 80 per cent of the retail trade and nearly 100 per cent of the wholesale trade of the United States is settled by checks. The amount involved in this trade is so large that, if the parties concerned had to make payment in cash, they would discover that it was impossible. There is not sufficient cash in the country to settle all transactions in cash. Checks accomplish the task by passing readily from hand to hand, quickly finding their way into the bank on which they are drawn, whereupon the amount is transferred on the books of the bank from one depositor's account to another, and is then ready to be drawn upon by another check. Most transactions are thus settled ultimately on the books of the banks, checks being the means by which the deposits are changed about. The time and effort saved by these methods are enormous.

Money orders and traveler's checks are also forms of drafts. — Checks are not always the best instrument to use in paying an obligation. The one who is to receive the money may not know the drawer of the check. He may refuse to sell to a stranger, fearing that the stranger's check may not be good. This is especially the case where the two parties live in different countries. An instrument is needed which will be

accepted without question, an instrument drawn by a party of such high standing that it will pass anywhere. Banks, express and telegraph companies, and the post office are such parties. Their orders to pay are accepted everywhere without question.

A postal money order is an order to pay, issued by the postmaster in one city on the postmaster in another city. The



Traveler's Check

In a recent year 650,000 travelers used this type of check for a total amount of over $136,000,000.

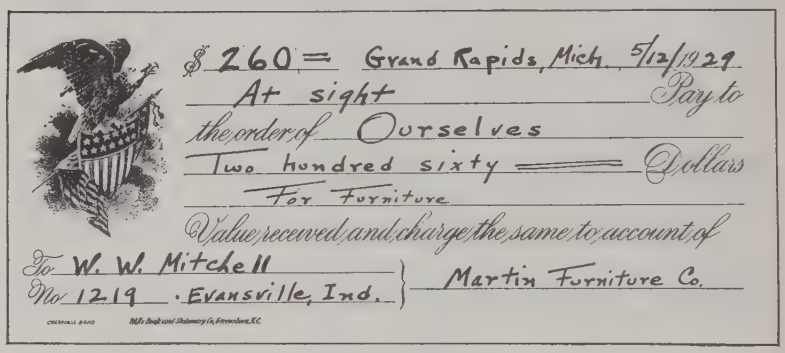
post office department of the government arranges to pay these money orders without actually shipping the money from one town to another.

Express companies, with their offices in local communities, handle money orders in a similar way. Telegraph companies send the order to pay from office to office by wire, giving quicker service than would be possible by mail.

Travelers, desiring to avoid the risk of carrying considerable sums of money with them, usually carry traveler's checks. They purchase these checks from a bank or express company, signing their name at one place on the check at the time of purchase. When they desire to cash one of the checks, they iden-

tify themselves by signing at another place on the check, usually in the presence of the one who is cashing the check. These traveler's checks are issued in convenient denominations, usually $10, $20, $50, and $100 (see illustration, page 191).

The commercial draft is an order drawn on a debtor. — When a creditor orders his debtor to pay, the instrument is known as a commercial draft. It is commonly used by sellers of goods in ordering buyers to pay. The following incident


$260 = Grand Rapids, Mich. 5/12/1929
At sight Pay to
the order of Ourselves
Two hundred sixty ═══ Dollars
For Furniture
Value received and charge the same to account of
To W. W. Mitchell
No 1219 Evansville, Ind.
Martin Furniture Co.

COMMERCIAL DRAFT

Widely used when sellers of goods draw on buyers for payment.

illustrates the use of a commercial draft: Mr. Mitchell, living in Evansville, Indiana, decides to buy some furniture for his home from a firm in Grand Rapids, Michigan. From the firm's catalog he selects the pieces he wants and incloses with his order a check for 10 per cent of the bill as evidence of good faith. The company ships the furniture, draws a commercial draft on Mr. Mitchell for the 90 per cent balance due, attaches the draft to the bill of lading received from the railroad company, and turns over the documents to its Grand Rapids bank, to be forwarded to a bank in Evansville. Now the buyer cannot get his furniture at the freight house until he presents the bill of lading. In order to obtain the bill of

lading he must pay the draft, which is waiting for him at the Evansville Bank. The furniture company protects itself by requiring 10 per cent to be paid in advance and by having the railroad hold the goods until the balance is paid. Mitchell benefits by not having to pay in full until the goods are practically in his possession. He might even arrange to inspect the goods before he paid the draft. The banks serve merely as intermediaries for the collection and transfer of the money.

Wheat, cotton, and many other commodities are regularly shipped " by draft with bill of lading attached." When the buyer and seller live in different countries, it is the common practice to refer to the draft as a " bill of exchange." These foreign bills of exchange are drawn when exports of goods leave the United States. Attached to the bill of exchange are certain important documents, including (*a*) the ocean bill of lading, (*b*) the marine insurance policy insuring the goods against loss, and (*c*) the invoice, or statement, itemizing the goods and their prices. These papers are sent by mail to an agent or representative in the foreign country, who handles the financial dealings with the foreign buyer.

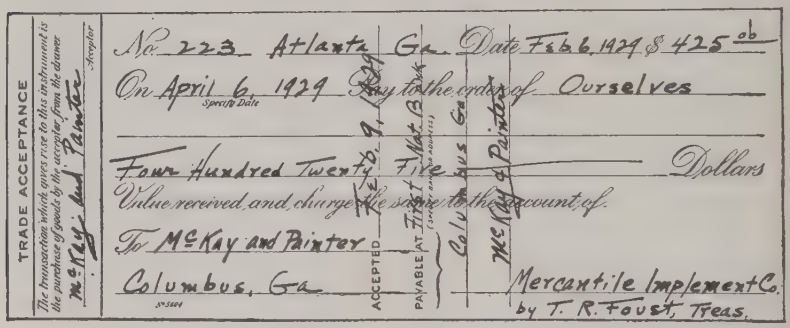
Drafts may be payable at sight, on demand, or at a specified future time. — When a draft orders the debtor to pay immediately, or at sight, it is known as a *sight* draft (see illustration, page 192). The draft may be drawn ordering the debtor to pay whenever the creditor demands the money ; such a draft is known as a *demand* draft. Finally, it may be drawn payable so many days, or months, after date, making a *time* draft. When a time draft is drawn, it becomes important to know whether or not the debtor agrees to the order and is willing to be bound by it. Accordingly, time drafts are usually presented promptly to the debtor with the request that he signify his agreement by signing the draft. If he signs the draft, the instrument becomes an " acceptance."

B. Time Drafts Normally Become Acceptances

(The trade accep' ance; the bank acceptance as used in foreign trade)

There are two types of acceptances, the trade acceptance, and the bank acceptance. Each is a form of draft, used in modern trade.

The trade acceptance is drawn by a seller on a buyer. — If a seller of goods draws a time draft on the buyer and the buyer accepts the draft, it becomes a *trade acceptance*, because it arises out of trade and the debtor has accepted the


TRADE ACCEPTANCE
The transaction which gives rise to this instrument is the purchase of goods by the acceptor from the drawer
McKay and Painter
Acceptor
No. 223 Atlanta Ga. Date Feb 6, 1929 $ 425 00
On April 6, 1929 Pay to the order of Ourselves
Specify Date
Four Hundred Twenty Five Dollars
Value received and charge the same to the account of
To McKay and Painter
Columbus, Ga.
ACCEPTED Feb 9, 1929
PAYABLE AT First Nat. Bank
Columbus Ga.
McKay & Painter
Mercantile Implement Co.
by T. R. Foust, Treas.

Trade Acceptance

The Mercantile Implement Co. sold a bill of goods to McKay and Painter, and drew on them for $425.00. Acceptance of this draft made it an obligation of the buyer to pay, which the seller could sell to his bank.

order to pay. When we say the buyer " accepts " the draft, we mean that he agrees to the order to pay the money, and proves it by writing " Accepted " across the face of the draft and signing his name. The acceptance then goes back to the seller of the goods who may hold it until maturity, or sell it to his bank if he desires funds at once.

To the seller the chief advantage of the trade acceptance is that he has the buyer's definite written acknowledgment of the debt. The fact that the buyer has signed his name to the acceptance is just as binding an obligation on the buyer as if

he had signed a promissory note. Then, too, some banks willingly buy these acceptances, because they are two-name paper; in case the buyer of the goods (who accepted the draft) does not pay, the bank may call upon the seller of the goods (who drew the draft and made himself liable for payment when he sold the acceptance to the bank).

One of the reasons why the trade acceptance is not more widely used is that many American firms are accustomed to, and decidedly prefer, open book accounts, which are somewhat simpler to handle, and which permit the buyer to take a cash discount for prompt payment of his account.

The bank acceptance aids commerce, especially foreign commerce. — A time draft drawn on a bank and accepted by the bank is a bank acceptance (frequently called a *banker's* acceptance). Whereas the trade acceptance typically involves two individuals, the bank acceptance involves one individual and one bank. The individual or business firm draws the draft and the bank accepts it. Bank acceptances arise in both domestic and foreign commerce. We may take an example from foreign commerce.

An importer of figs in Chicago desires to buy $6,000 worth of figs from a firm in Smyrna, Asia Minor, on three months time. Since the credit of the Chicago firm is not well established in Asia Minor, it must furnish some kind of assurance to the fig exporter that the figs will be paid for. To that end the importer asks his banker in Chicago for a " Letter of Credit." If the Chicago bank is satisfied that the importer will pay the bank in three months the $6,000 plus a commission, it will issue the letter of credit (see form on page 196). As the illustration shows, the letter of credit is addressed to the Smyrna fig exporter and authorizes him to draw a draft on the Chicago bank for the $6,000, due in three months. This assures the exporter his money. It pledges the bank to make payment.

ILLINOIS MERCHANTS TRUST COMPANY

COMMERCIAL LETTER OF CREDIT
ORIGINAL

$6,000.00 No. 1235

Chicago, Ill. AUGUST 10TH, 1929

To SMYRNA FIG EXPORTING COMPANY,
SMYRNA, ASIA MINOR.

We hereby authorize you to draw at NINETY DAYS SIGHT
on ILLINOIS MERCHANTS TRUST COMPANY, CHICAGO, ILLINOIS.
for SIX THOUSAND DOLLARS. . . . . in all
for account of CHICAGO IMPORTING COMPANY, CHICAGO.
for invoice cost of FIGS.

to be shipped to NEW YORK.

THE FOLLOWING CONDITIONS MUST BE COMPLIED WITH
BILLS OF LADING TO ORDER OF SHIPPER AND ENDORSED IN BLANK.
SHIPMENTS TO BE COMPLETED, DRAFTS DRAWN AND ADVICE THEREOF
SENT TO US BEFORE OCTOBER 10, 1929
DRAFTS TO BE ACCOMPANIED BY ABSTRACT OF INVOICE, ONE OF EACH
BILL OF LADING ISSUED AND A LETTER SIGNED BY THE NEGOTIATING BANK
STATING THAT THE REMAINING BILLS OF LADING TOGETHER WITH CERTIFIED INVOICES AND CONSULAR CERTIFICATES HAVE BEEN SENT TO
G. W. SHELDON & COMPANY, NEW YORK.
DRAFTS TO BEAR THE WORDS "DRAWN UNDER ILLINOIS MERCHANTS TRUST COMPANY COMMERCIAL LETTER OF CREDIT NO 1235
DATED AUGUST 10TH, 1929
INSURANCE CERTIFICATES COVERING MARINE AND WAR-RISK MUST ACCOMPANY DRAFTS.

ALL PAYMENTS UNDER THIS CREDIT MUST BE ENDORSED ON BACK HEREOF

We hereby agree with the drawers, endorsers and bona fide holders of bills drawn under and in compliance with the terms of this credit that the same shall be duly honored.

ILLINOIS MERCHANTS TRUST COMPANY

Specimen Copy

COMMERCIAL LETTER OF CREDIT

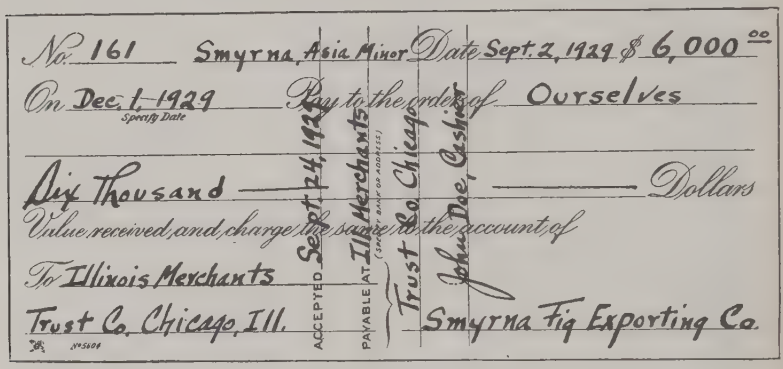
Such a letter authorizes the seller of goods to draw a draft on a certain bank. When the draft is accepted, it becomes a "banker's acceptance." Such acceptances, being the obligation of a bank, are superior to those drawn on individuals.

The letter of credit is then either cabled or mailed to the fig exporter in Smyrna who proceeds to place the figs on board

ship. The exporter, having received the various shipping documents, including the ocean bill of lading and the marine insurance policy, takes the documents together with his letter of credit to his bank in Smyrna. There he draws a time draft for $6,000 on the Chicago bank, as he is authorized to do by the letter of credit. The Smyrna banker, after examining the documents to see whether they are in due form, purchases the draft, paying the exporter cash for it. Thus the exporter gets his money and is out of the transaction. The Smyrna bank now sends the draft, with all the other documents attached, to its correspondent bank in New York. Since the papers are sent by mail while the figs are moving by freight, the New York bank will receive the papers before the figs arrive in New York. The New York bank, acting under the instructions of the Smyrna bank, sends the papers by mail to Chicago where the draft is accepted by the Chicago bank, thus becoming a bank acceptance. The acceptance is then sold in the "acceptance market." The sale of the bank acceptance in the market gives the New York bank funds with which to reimburse the Smyrna bank for the money it advanced to the exporter. The New York bank may ship the money to Smyrna or, more likely, simply place the amount on its books to the credit of the Smyrna bank. The buyer of the acceptance, by purchasing it, supplies the funds which finance the transaction in figs.

When the figs arrive in Chicago, the importer must present the bill of lading in order to get his goods. The Chicago bank has the bill of lading; knowing that it is liable for the payment of the acceptance, the bank is careful about releasing the bill of lading which controls the figs. However, if the Chicago bank is satisfied that the importer will pay the bank the $6,000 when due, the bill of lading will be given him. If the bank is doubtful, the importer will be required to sign a trust receipt,

which pledges the importer to hold in trust the funds derived from the sale f the figs, placing these funds in the bank for the express purpose of meeting the bank acceptance when due.


No. 161 Smyrna, Asia Minor Date Sept. 2, 1929 $ 6,000 00
On Dec. 1 1929 Specify Date
Pay to the order of Ourselves
Six Thousand Dollars
Value received, and charge the same to the account of
To Illinois Merchants
Trust Co. Chicago, Ill.
Smyrna Fig Exporting Co.
ACCEPTED Sept. 4, 1929
PAYABLE AT Illinois Merchants Trust Co. Chicago
John Doe, Cashier

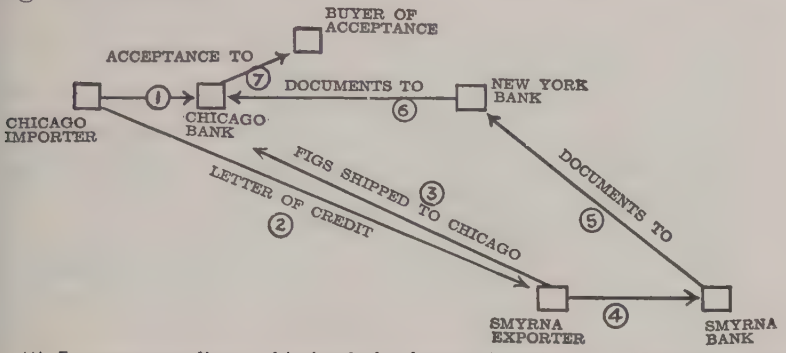
BANKER'S ACCEPTANCE

Under authority of letter of credit, exporter draws a draft on an American bank. Accepted, it becomes a banker's acceptance.

Thus when the three months are up, the importer will have sold most or all of his figs and will have placed $6,000 in the bank; these funds are turned over to the holder of the acceptance at maturity, thus closing the deal.

In the foregoing transaction it will be observed that the Chicago bank did not lend a cent of money. It simply authorized and later accepted a draft drawn on itself. When the draft (or acceptance) came due, the importer provided the bank with the funds necessary to pay it. The bank loaned only its name, or its credit. For so doing it received a small commission, typically $\frac{1}{4}$ of 1 per cent (or $15 in the fig transaction). Of course, the bank assumed some risk, for if the importer had failed to provide the funds, the bank would have been compelled to pay the acceptance out of its own funds.

This entire transaction may be visualized as below, following the numerals:



(1) Importer applies to his bank for letter of credit. (2) He sends letter of credit to exporter in Smyrna. (3) Exporter ships figs and (4) takes documents to his bank, where he sells the draft and receives his money. (5) Documents are sent to correspondent bank in New York, and (6) forwarded to Chicago bank where draft is "accepted." (7) Acceptance is sold to an investor and at maturity presented to Chicago bank for payment.

Bank acceptances raise funds cheaply. — Since bank acceptances are the liability of banks rather than of individuals, they are considered quite safe and a large volume of funds is always seeking investment in them. This causes the rate at which they are discounted to be quite low, typically around 3 to 4 per cent per year. Accordingly, importers and all other firms in a position to use this instrument usually do so, for they save money thereby.

Policies lead through instruments to institutions. — We have been observing some of the financial policies adopted by executives in working out their problems. We have seen how certain policies lead to the use of certain instruments; how, for example, the policy of incorporating and raising capital from owners leads to the use of shares of stock; how long-time borrowing gives rise to bonds; how short-time borrowing causes simple promissory notes to arise; how

ordering one's debtor to pay creates drafts. In every case the particular instrument grows out of a particular policy.

But what happens to these instruments? Do they fly through the air and drop into the hands of those who are to receive them? Or do they pass through certain channels and in so doing become the materials handled by banks and other financial institutions? Typically they do the latter. A whole range of institutions exists in our society to handle these various financial instruments and thereby to help carry out financial policies. These institutions are a vital part of our financial system. To these institutions we turn our attention in Part IV.

QUESTIONS

1. Define or explain:
   - (*a*) Money order
   - (*b*) Traveler's check
   - (*c*) Trade acceptance
   - (*d*) Commercial letter of credit
   - (*e*) Restrictive indorsement
   - (*f*) Bill of lading
   - (*g*) Bank acceptance
   - (*h*) Check

2. Why are checks so much more widely used than ordinary drafts?

3. Give an instance in which (*a*) blank indorsement, (*b*) special indorsement, and (*c*) restrictive indorsement, of a check could be safely and appropriately used.

4. Why do some drafts become trade acceptances while others do not?

5. Why is the bill of lading such an important paper in connection with drafts and acceptances? Why does the law make forgery of a bill of lading a criminal offense?

6. A certain firm manufacturing and wholesaling electrical goods prefers to draw drafts on its customers, get the drafts accepted, and sell the trade acceptances to its bank to raise funds needed for current expenses.

A wholesale grocer prefers to sell on open book accounts to his customers, mailing them a statement of the amount due on the first of each month, and offering a discount of 1 per cent if the bill is paid within ten days. This firm borrows from its bank on its single promissory note.

How do you explain the preference of the one firm for trade acceptances and the other for open book accounts?

7. State two differences between the bank acceptance and the trade acceptance; two differences between the trade acceptance and the promissory note.

8. Indicate by a check mark (✓) the correct term in each case in the following table:

	Bank acceptance	*Promissory note*	*Trade acceptance*
Drawn up by	Bank —— Seller of goods	Creditor —— Debtor	Creditor —— Debtor
Addressed to or drawn on	Bank —— Buyer	Creditor —— Debtor	Seller —— Buyer
Obligation to pay of	Bank —— Buyer —— Buyer of acceptance	Creditor —— Debtor	Drawer —— Acceptor
Held to maturity by	Accepting bank —— Buyer of acceptance	Creditor —— Debtor	Drawer —— Acceptor

9. Suppose the accepting bank charges at the rate of $\frac{1}{4}$ of 1 per cent flat (regardless of time), and the discount rate is 3 per cent per year on bank acceptances, while the rate on straight promissory notes is 5 per cent; how much (in dollars) could an importer save by using the bank acceptance if he needed $100,000 for ninety days?

10. A New York firm imports $80,000 worth of raw silk from Yokohama, Japan. Follow step by step the financing of the deal, using a letter of credit and a bank acceptance, and assuming that the Yokohama bank has a correspondent bank in New York.

11. Would the use of the bank acceptance in the previous question tend to make silk goods cheaper to the consumer than if some other instrument had been used to finance the deal? Why?

12. Show the relationship between financial policies, instruments, and institutions.

TOPICS FOR FURTHER STUDY

How Drafts and Acceptances Are Used:

Dewey and Shugrue, *Banking and Credit*, chaps. III–V, XXVI.
Moulton, *Money and Banking*, part II, pp. 31–39.
Holdsworth, *Money and Banking*, pp. 102–116.
Magee, *Materials of Banking*, chaps. VI, XIX.
Moulton, *Financial Organization*, Revised Edition, pp. 390–401
Lincoln, *Applied Business Finance*, chap. XVII.
Willis and Edwards, *Banking and Business*, pp. 267–276.

PART IV

FINANCIAL INSTITUTIONS

PURPOSES OF PART IV

1. To understand why we have different financial institutions
2. To see the characteristics of each of these institutions
3. To learn something of the services, financial and otherwise, which these institutions render to society

CHAPTER HEADINGS OF PART IV

CHAPTER	XII.	The Work of Financial Institutions in General
CHAPTER	XIII.	Savings Banks
CHAPTER	XIV.	Building and Loan Associations
CHAPTER	XV.	Mortgage Companies and Land Banks
CHAPTER	XVI.	Bond Houses
CHAPTER	XVII.	Trust Companies
CHAPTER	XVIII.	Insurance Companies
CHAPTER	XIX.	Commercial Banks
CHAPTER	XX.	Federal Reserve Banks
CHAPTER	XXI.	Stock Exchanges and the Money Market
CHAPTER	XXII.	Financial Institutions and the Investor

Three years ago Brace was accidentally killed in an automobile accident. He had been carrying $7,000 of life insurance. In addition to this, his widow received $5,000 from the automobile insurance company which had insured the owner of the car that killed Brace. If Mrs. Brace had carefully invested that $12,000 in good 6 per cent bonds, she would have had $720 a year or $60 a month to help meet the family expenses. As it was, however, she let a salesman sell her some fake mining stock on a promise of from 60 to 100 per cent dividends per year. As a result she lost the money, and has had to move back to the home of her aged parents, who have scarcely enough to keep themselves and her family in necessities.

Where did the insurance companies get the $12,000 they paid to Brace's widow? Could Brace have done anything to prevent the stock salesman from getting hold of the money?

"The Merchants' Trust Company claims to be the biggest bank in the city," says Burton. "I remember when they were organized in 1902. They asked me to buy stock in it, but I was afraid of it because they were going to do a lot of things besides banking — manage property for people while they were away, settle up affairs when men died, and so on. I thought they would get all mixed up and fail in a few years. But here they are, the biggest and most prosperous bank on the street."

"Yes, I made my will in 1915 and named my brother and my son as executors to carry it out," said Howe. "Brother isn't in very good health and may die before I do. I'm going to change that will and let the Merchants' Trust handle things. I know they'll be in good health when I die."

How does a trust company differ from an ordinary bank? Is it safe for people to turn over everything they have to such a concern?

CHAPTER XII

THE WORK OF FINANCIAL INSTITUTIONS IN GENERAL

A. The Services Rendered by Financial Institutions
B. Why We Have a Variety of Institutions

In Parts II and III we have followed the financial executive as he works out some of his policies and chooses instruments for carrying out his policies. Quite often the plans of financial executives call for the raising of funds, that is, the obtaining of other people's money for use in their businesses. However, there are, nowadays, others besides business firms who are seeking other people's money. We have in society a large number of persons who are borrowing funds every day to build homes for themselves, to buy pleasure cars, to pay hospital bills, or to do one of a thousand other things for which money is necessary. On the other hand, we have millions of persons who are saving money; and, not wishing to hoard their savings, desire to invest them. The question naturally arises: How are the persons desiring funds brought into contact with the persons who are saving funds?

How savers of funds and users of funds are brought together. — Those desiring funds are brought into contact with those saving funds in three ways:

1. *Direct contact* may be established by one party going *directly* to the other party and negotiating with him. A farmer borrowing from a wealthy townsman in order to secure funds

to buy a farm, a merchant obtaining funds from a relative to start his store, a corporation asking its stockholders or the general public to buy its securities, and Bill asking John to lend him $10 until Saturday evening, are everyday examples of this method.

2. A *broker* may become the active agent in getting the two parties together. A broker is a man who neither lends nor borrows. He is one who simply acts as a go-between and if a deal is made, he collects a commission for his services. In fact, this go-between relationship is the essence of true brokerage, not only in the financial field, but in all fields. The real-estate broker gets a commission if he succeeds in bringing together the buyer and seller of property; the stock and bond broker gets a commission for succeeding in buying or selling securities belonging to other people; the brokers in coal, flour, sugar, coffee, and many other commodities work, not as salesmen representing one firm, but as independent agents buying and selling upon the order of other people; insurance brokers solicit insurance, then place it among various insurance companies. The true broker never owns the thing he deals in. He makes his money, not from selling goods for more than they cost him, but from his commissions for aiding the seller to sell or the buyer to buy.

In the financial world brokers are important. They are, as we shall see (Chap. XXI), the intermediaries through whom practically all the transactions on the stock exchange are effected. They operate prominently in the field of foreign exchange. Individuals and banks desiring to buy or sell drafts on foreign banks would have great difficulty finding one another if it were not for these exchange brokers. In the mortgage business, brokers have been found indispensable in bringing together the one with funds and the borrower who is mortgaging his property. There is also the note broker who

takes the promissory notes of business firms and finds a market for them.

3. *A financial institution*, such as a bank, may be the means by which funds get shifted from the hands of the savers into the hands of the users. The chief differences between a broker and what is called a financial institution are two: (*a*) a broker is generally an individual, while a financial institution is an organization, usually incorporated and generally subject to special regulations by the government; (*b*) a broker, as pointed out above, does not own the thing he deals in, whereas a financial institution typically does own the funds, stocks, bonds, or notes dealt in.

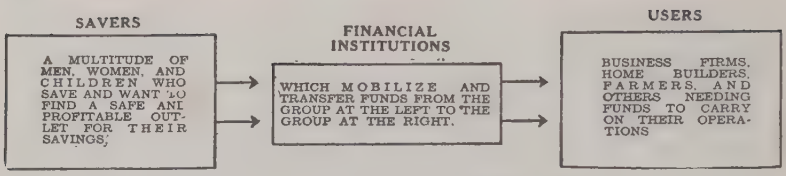
This section of our study (Part IV) is to be devoted to the principal financial institutions, the services they render, and how they render them. Before we take up the study of each of these institutions separately, we may inquire what services financial institutions in general render in modern society.

A. The Services Rendered by Financial Institutions

(Transfer funds from savers to users; pay interest; assemble funds in the appropriate amount, at the appropriate time and place; promote efficient business methods)

The principal services performed by these institutions, whether banks, insurance companies, bond houses, trust companies, or some other, are the following:

They bridge the gap between the savers of funds and the users of funds. — It is comparatively easy for the saver of funds to take his funds to a financial institution and leave them there. Likewise it is easy and convenient for those needing funds to apply to a financial institution. Hence these institutions act as middlemen serving both savers and users of funds. The idea can be represented as follows:


SAVERS
A MULTITUDE OF MEN, WOMEN, AND CHILDREN WHO SAVE AND WANT TO FIND A SAFE AND PROFITABLE OUTLET FOR THEIR SAVINGS.
FINANCIAL INSTITUTIONS
WHICH MOBILIZE AND TRANSFER FUNDS FROM THE GROUP AT THE LEFT TO THE GROUP AT THE RIGHT.
USERS
BUSINESS FIRMS, HOME BUILDERS, FARMERS, AND OTHERS NEEDING FUNDS TO CARRY ON THEIR OPERATIONS

Financial Institutions as Middlemen

In collecting and transferring funds from the group at the left to the group at the right, these institutions serve the group at the left in the following ways:

1. They add to the savings by the payment of interest. This makes the individual's savings grow much faster than they would if they earned no interest. A person twenty-one years of age, for instance, might estimate that he will have, say, forty-six years of wage-earning life. If he saves but $5 per month and invests it at six per cent compound interest, he would discover at the end of his wage-earning life that he had saved $2,760, but that the accumulation of interest had brought his total to nearly $15,000.

2. The group at the left is relieved of the necessity of guarding its savings or paying rent for a safe-deposit box in which to store money.

3. Savers are further served by being relieved of the necessity of choosing who shall ultimately have the use of their savings. Financial institutions are specialists at the task of finding persons who can safely and profitably use the funds of savers.

The remaining services of financial institutions apply principally to the group at the right.

Financial institutions assemble for borrowers the appropriate amount of funds at the appropriate time and place. — A sugar refining company may need a half-million dollars to buy raw sugar. It is not likely that one person can be found who is willing and able to advance this amount. By going to a

financial institution, the entire amount can be obtained, because hundreds or thousands of savers will have placed their funds in that institution. Not only do financial institutions assemble many small savings to make one large loan, but they may also do the reverse — break up one individual's saving of large amount into many small loans, as when an insurance company collects a seventy-five-thousand-dollar premium from a policy holder and lends the money to various individuals. Thus financial institutions take savings of various amounts and shift these savings to the borrowers in amounts appropriate to the borrower's needs.

They also assemble funds for borrowers at the appropriate *time*. A sugar refining company may need to borrow heavily in the autumn to buy raw sugar, while farmers may need to borrow in the spring to plant their crops. Financial institutions aid in making funds available at the time they are needed. This may involve carrying some funds as idle money from winter to spring or summer to autumn.

They perform also the task of assembling funds at the appropriate *place*. The sugar refining company may need part of its funds in Cuba, part in New York, and part in the beet-sugar district of Colorado. Financial institutions shift the funds accordingly. The northeastern section of our country may save more money than can be profitably used in that section. Financial institutions move such funds to other parts of the country or to other countries.

Obviously, financial institutions, in so assembling funds, greatly lighten the tasks of treasurers, who are charged with the responsibility of raising capital for business concerns.

They encourage some businesses by furnishing them funds and discourage other businesses by refusing them funds. — Financial institutions act as a selective agency in society,

aiding certain businesses to survive and develop, while causing other businesses to fail for lack of funds. The chief basis on which this selection is carried out is *profit*. If a business concern can show reasonable certainty of making profits, it can usually obtain funds from financial institutions; if it cannot prove itself profitable, then financial institutions do not care to lend it funds for fear they will be unable to collect the loan when it is due. Many times critics have assailed this system, pointing out that a good cause, such as better housing for the poor, may be denied funds because of the fear that "it won't pay," while a questionable cause, such as the production of luxurious furs, jewels, or sport automobiles, can obtain plenty of funds because it is believed that "they will pay." But it is clear that the fault here lies not with the financial institutions, but with the profit system. As long as business is conducted for profit, financial institutions must apply the profit test when passing on applications for funds. Financial institutions handle other people's money. These persons (the savers of funds) expect their money to be invested safely and to earn them interest. The only course of action open to the managers of financial institutions is to inquire carefully into the profits of the various businesses applying for funds.

They promote honesty and punctuality in money matters. — The person who lives within his income and pays his bills promptly acquires an enviable reputation in business and banking circles. His credit standing is good. Usually he can borrow when he needs money, for "his word is as good as his bond." Doors are open to him that are closed to the man who puts off payment of his bills as long as possible, who invents all manner of excuses to avoid paying, and who lives beyond his means. Financial institutions come to know the men and women who are industrious, honest, and thrifty, and they always prefer to lend to the person of moderate means

and good morals rather than to the person of large means and bad morals. Thus good character is encouraged by financial institutions.

They render certain miscellaneous services besides those connected directly with funds. — Banks help their customers make out their income tax reports. They stand ready to show customers how to keep their books correctly. Information regarding crops and other business conditions is assembled and distributed free by some financial houses. Life insurance companies aid campaigns for the promotion of health. Investment bankers sometimes insist on reforms in the management of concerns whose stocks or bonds they are undertaking to sell. Thus the influence of financial institutions ramifies throughout society in numerous ways other than in the mere handling of funds.

B. Why We Have a Variety of Institutions

(Specialization renders better service and increases profits; integration of institutions occurring)

While financial institutions render, in a broad, general way, the services mentioned above, each separate institution renders certain distinctive services to society. Instead of one institution attempting to perform all kinds of financial work, we have a variety of financial institutions in society, each specializing in a given field.

Specialization makes for better service and more profits. — The reason why we have a variety of institutions in our financial system is that a variety of institutions makes possible specialization, and specialization makes possible better service and more profits. This is true with individuals as well as with business concerns. For example, the development of medical specialists, of highly skilled mechanics, and of experts

in various phases of agriculture testifies to the fact that better service and increased income are likely to result from specialization.

So with financial institutions. When a bond house specializes on the task of carefully selecting, purchasing, and selling bonds, it can do much better than when it tries at the same time to run a bank, an insurance company, and a stock exchange. By specializing, a bond house can draw into its organization men with talent and experience in the bond business; it can thereby command the respect and patronage of investors, render its customers better service, and increase its own profits. Living, as we do, in an age of specialization, it is not surprising that financial institutions are specializing.

Integration of specialists is occurring. — Along with the tendency toward specialization, another tendency is working, namely, the tendency to bring various specialists together. On the staff of a large hospital we are likely to find a great many specialists, each an expert in his line of work. No matter what ails a patient, a specialist is at hand to diagnose and prescribe. The hospital brings together the specialists for coöperation and for better service to the public. This bringing together, or integration, does not mean less specialization. Rather it means more effective specialization.

A similar tendency toward integration may be observed in the field of selling merchandise. A department store really brings together, under one roof, many specialized stores. Each store or department is in charge of specialists. By having all these specialists in one institution, the management believes that increased sales and profits will result.

So with financial institutions. The tendency is for specialists to be brought together under one roof. Some of our larger banks and trust companies now offer the services which were scattered formerly among a half dozen separate and distinct

institutions. For example, a large bank may have a savings department, a bond department, a trust department, a commercial banking department, a mortgage loan department,

Courtesy Continental Illinois Bank and Trust Co.

A Department Store Bank

The tendency in modern banking is to bring many facilities under one roof. Such banks as this operate a savings department, a bond department, a trust department, a safe-keeping department, and a commercial banking department.

and a department renting safety-deposit boxes. Specialization is carried on to a higher degree than ever; but the specialists are assembled in one institution. The "depart-

ment-store bank" aims to supply the financial needs of its customers without the customers having to leave the building.

Whether our specialized financial institutions exist separately or under one roof, they do much business with each other. Commercial banks purchase bonds from bond houses and lend money to bond houses. Insurance companies carry deposit accounts in banks, purchase bonds from bond houses, sell bonds from time to time through the stock exchange, and frequently are directed by their policy holders to turn over at death their insurance money to trust companies. Financial institutions are continually dealing with one another as well as with business firms and private individuals. In so doing they are working as a system, the financial system of our society.

QUESTIONS

1. What is saving? Where ultimately does it come from? Where does it go? What are the three general ways by which it gets from its source to its destination?

2. Suppose you had saved $30 and had the money in a shoe box in a bureau drawer. You decide to put that money to work. Give three or four ways by which you might put it to work. What advantages would there be to you in having your savings at work? What advantages to others?

3. Suppose you try to put your savings to work by the *direct method*, that is by placing them directly in the hands of the one who will ultimately use your savings. What difficulties would you encounter?

4. If you decide to put your savings to work through a financial institution, say a bank, what advantages would you feel had been gained over the direct method of placing out your savings? Can you suggest some disadvantages of this method?

5. Suppose your father is in business and obtains a loan of $500 from the bank. Is it possible that he might have received the $30 which you deposited in that bank? Is it possible that your $30 found its way into the hands of some business enterprise a thousand miles away? How?

6. Explain how a financial institution might apply the profits test to a business man asking for a loan?

7. "Character is one of the best safeguards for a loan." Why? How do financial institutions help develop character?

8. How could a bank argue that it paid to help a customer make out his income-tax report? Why might a bank be willing to assist a customer to install a better bookkeeping system?

9. What are the advantages to a customer of having "department-store banks"? What disadvantages can you suggest to either the customer or the bank?

10. "There will always be persons who prefer the small shop to the department store; similarly some persons will always prefer the small neighborhood bank to the big down-town bank." Why do some persons prefer the small shop and the small neighborhood bank?

11. What forces are working to produce specialization among financial institutions? What forces are working to bring together financial institutions? Are these forces in conflict? Explain.

TOPICS FOR FURTHER STUDY

The Work of Financial Institutions in General:

Marshall and Lyon, *Our Economic Organization*, chap. XX.
Marshall, *Readings in Industrial Society*, pp. 346–349.
Moulton, *Financial Organization*, chaps. X, XXIX.

CHAPTER XIII

SAVINGS BANKS

A. The Organization and Operation of a Savings Bank
B. The Different Kinds of Savings Banks
C. The Services Rendered by Savings Banks

One of the institutions connecting the savers and the users of funds is the savings bank. In this chapter we shall see how savings banks are organized and operated, and observe some of the ways in which they aid the savers and the users of funds. We can do these things best by beginning with an example of how a savings bank might be organized and operated.

A. The Organization and Operation of a Savings Bank

(Organizing a bank; safety considerations; investments; why some savers prefer savings banks to bonds)

Organizing a savings bank. — Suppose we organize and open for business the Thrift Savings Bank. First we must secure a charter from the state and obtain the necessary amount of capital by selling shares of stock in our bank. Since banking is of such vital importance to the community, every state in the Union has provided special laws governing the organization and conduct of banks. We must therefore consult the statutes, that is, the written laws, of the state in which we intend to start our bank to find out, among other things, how much capital we need to raise before opening our doors for business.

Assuming that we find that $25,000 capital is the minimum with which we may start our bank, we circulate stock subscription blanks and obtain subscriptions for 250 shares of stock of the par or face value of $100 each. The chief argument we use to get these subscriptions is that our bank promises to be profitable. We show that we can probably invest our own capital and the deposits brought in to us at a good rate of interest, pay our necessary expenses, and have a balance left over as profit. We make clear on our stock subscription blanks that we are offering the shares of stock at $120 each, or $20 over par value. This $20 on each share will be labeled "Surplus," and we desire a surplus partly because the public has come to regard a surplus as a sign of strength, and partly because some states require their banks to have a surplus. When the entire 250 shares are subscribed and paid for, we have $30,000 in cash, of which $25,000 is paid for capital stock and $5,000 is paid for surplus.

Having called a meeting of the stockholders, and having elected a board of directors, we obtain our charter and have the following:

BALANCE SHEET OF THE THRIFT SAVINGS BANK

Assets		*Liabilities and Ownership*	
Cash on hand	$30,000	Capital stock	$25,000
		Surplus	5,000
			$30,000

The directors select a president, a vice-president, and a cashier. Clerical help is employed, a room is rented, and $2,000 of the cash is spent for equipment. When the doors are opened for business, the only change in the balance sheet is that cash is now $28,000, and equipment $2,000 on the assets side.[1]

[1] The spending of a bank's cash for furniture, safes, and other equipment does not affect the surplus of the bank. The surplus is untouched; the only differ-

BALANCE SHEET

Assets		*Liabilities and Ownership*	
Cash on hand	$28,000	Capital stock	$25,000
Equipment	2,000	Surplus	5,000
	$30,000		$30,000

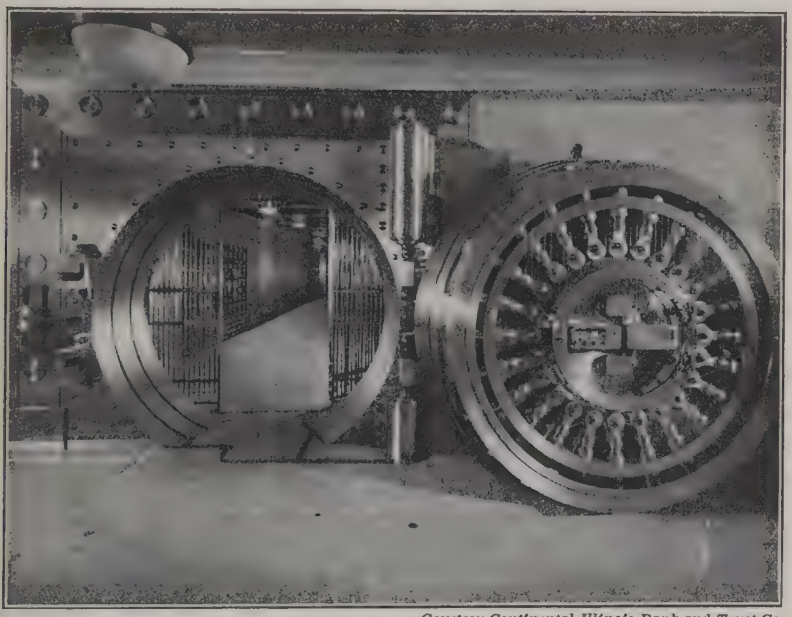
Since a savings bank is organized primarily for the sake of attracting savings deposits, we must take steps to win depositors for our bank. We have two appeals that we can make to the public to become depositors; one is that our bank is a safe place in which to deposit savings, and the other is that we will pay interest on deposits.

Safety involves physical safety and management safety. — Safety of a bank's deposits is a twofold matter. First of all it means *physical safety*, such as strong boxes, burglar-defying vaults, protective detective service, and the like. Many persons believe that these are the chief protection for their deposits. As a matter of fact, these factors of physical safety are of concern chiefly when it comes to safeguarding the valuables stored in the vaults. Most of these valuables are in safety-deposit boxes which are rented by the bank to the public. The valuables kept in these boxes are not deposits in the bank at all; they belong to the one who has rented the box, not to the bank. If they are stolen, the loss falls on the owner, provided the bank has been careful to safeguard them. The owner may avoid this loss by carrying burglary insurance, but he cannot force the bank to assume the loss.

For the money deposited in the bank, however, the depositor should rely, not so much on physical safety, as on what may be called *management* safety. The reason for this is that very little of the depositors' money is kept on hand in the

ence is that, before the equipment was purchased, the surplus existed in the form of cash, whereas after the purchase the surplus exists partly in the form of cash and partly in the form of equipment.

bank. Since interest is to be paid to the depositor, the bank must invest the money so as to bring in interest. In this work the ability and character of the bank's officers become of supreme importance in safeguarding the depositors' funds.



Courtesy Continental Illinois Bank and Trust Co.

PHYSICAL SAFETY IN A BANK

Modern bank vaults are practically burglar-proof. The door is usually of heavy steel construction (this one weighs 54 tons), and is operated by a time lock which opens only at the time set. Safety-deposit boxes within the vault are rented to the public for the storage of their valuables.

Bank failures are caused mainly by poor management, not by burglary. If the management invests the deposits in sound enterprises, all may be well. But if the management invests the depositors' savings in risky enterprises, the losses may ruin the bank. Losses fall at first on the owners of the bank. But if the loss is so large that it wipes out all the capi-

tal stock, surplus, and profits which the owners had invested, and still is not all met, what happens? Then the owners, according to the law in most states, must pay out of their own pockets an assessment equal to the par value of their holdings of stock. In such a case, a person who had bought $500 worth of stock would have to put in $500 more. If this additional contribution by the owners should not cover all the loss, then the depositors lose. The depositors' loss is a *pro rata* one, that is, each depositor loses the same *percentage* of his savings.

Paying interest aids in attracting deposits. — Assuming that the public is satisfied concerning the safety, both physical and managerial, of our bank, the next question is, what rate of interest can we offer in order to attract deposits? We want to fix a rate that will be sufficiently high to prove attractive to depositors and that will yet be sufficiently low so that we can pay it out of earnings and have something left for running expenses and profit. The balancing of these considerations has caused the rate paid on savings deposits to be set at 3 per cent in most large cities, 4 per cent in most smaller cities and towns, and 5 per cent and occasionally even more in some of the rural districts of the West. Our directors decide that 4 per cent is the rate they will pay. They effectively advertise this 4 per cent interest and the safety of the bank, and within a few days $2,400 in savings accounts are deposited. This, added to the $28,000 of cash on hand before opening the bank, makes $30,400, cash on hand. The balance sheet then would appear as follows:

Assets		*Liabilities and Ownership*	
Cash on hand	$30,400	Deposits	$ 2,400
Equipment	2,000	Capital stock	25,000
	$32,400	Surplus	5,000
			$32,400

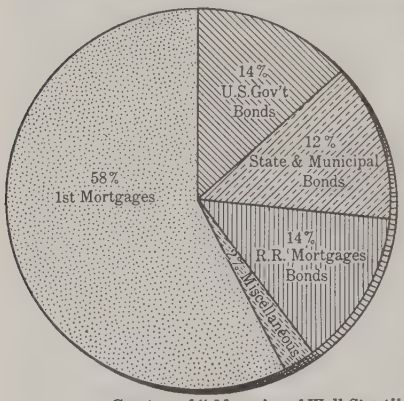
Determining the amount and kinds of investments. — As long as this cash remains on hand, it is idle and unproductive; it is doing nothing that will help pay the 4 per cent promised to the depositors or the running expenses and expected profits for the owners of the bank. It must be put to work — invested at a good rate of interest — in such forms that the principal will be safe. We must next decide how much of the cash may be invested and in what forms it may be invested.

First, how much of the cash may we put to work and how much must we keep on hand? The answer to this question is determined by the nature of our deposits. Are our deposits payable at any moment? If so, we must keep a considerable amount of cash on hand or in such forms of investment that we can quickly convert these investments into cash. Are our deposits payable only after notice of a certain number of days? If so, we need keep very little cash on hand, since time will be given us to get the money before we need to pay it out. In savings banks it is the rule to accept savings accounts as time deposits and to have it understood by the depositor that the bank may, if it chooses, require notice of thirty or sixty days before the deposit can be withdrawn. Many savings banks do not enforce this provision, but the fact that it exists permits the bank to invest a larger proportion of its cash than it would dare invest if the deposits were all payable on demand. Our bank, being a savings bank, will have it understood that if the bank cares to, it may require thirty days' notice before withdrawal of deposits. Accordingly, we may proceed to invest all but a few hundred dollars of our cash on hand.

Second, in what forms shall we invest this money?[1] We

[1] In many states the answer to this question is not left wholly to the bankers, inasmuch as the state law specifies what are legal investments for savings banks.

must make our cash earn for us at least 6 per cent if we are to pay 4 per cent on our deposits, pay all expenses, and have a fair margin of profit left. The old advice, "Don't put all your eggs in one basket," is usually observed by savings banks. They buy bonds with part of their money, lend part to farmers or to real estate owners on mortgage security, and sometimes make short-time loans to business men. Our problem is to invest about $30,000 so as to get an average yield of approximately 6 per cent. United States government bonds may be purchased to yield from 3 to 4 per cent, good railroad bonds may be had which will yield 5 per cent, bonds of strong industrial and manufacturing companies are available to yield 6 per cent, and mortgages may be purchased to yield from 6 to 8 per cent. In general, the higher the yield, the more risk of loss there is in the investment, so that it is not good policy to put all the cash into 7 per cent mortgages. Let us say that $10,000 of our cash is invested in 5 per cent railroad bonds, $10,000 in 6 per cent industrial bonds, and $10,000 in 7 per cent mortgages on real estate. This will give our bank an average yield of 6 per cent and will provide us with a class of bonds which can be readily sold on the market if we need to convert such bonds into cash. (The graph above gives us some idea of the proportional uses to which each dollar, or each thousand dollars, is put when deposited in a savings bank.)



Courtesy of "Magazine of Wall Street"

THIS GRAPH SHOWS HOW THE DOLLAR THAT YOU DEPOSIT IN A SAVINGS BANK IS INVESTED FOR YOU

Our balance sheet would then appear as follows:

Assets		*Liabilities and Ownership*	
Cash on hand	$ 400	Time deposits	$ 2,400
Railroad bonds	10,000	Capital stock	25,000
Industrial bonds	10,000	Surplus	5,000
Real estate mortgages	10,000		
Equipment	2,000		
Total	$32,400	Total	$32,400

A savings bank, to make profits, must have a large amount of deposits. — It is evident that our bank must have more income than these $30,000 of investments will bring, since 6 per cent on $30,000 is only $1,800 per year, and the salary of the cashier alone will require more than that, while the 4 per cent promised on the $2,400 of deposits will require $96 a year. Unless our bank grows, and attracts a much larger volume of deposits, it cannot remain in business. Suppose that by the end of the first year $60,000 of deposits had been received, some of which have been invested for only a few weeks. In that event, we may find that the income statement of our bank for the first year would run as follows:

Income from investments		$4,200
Income from rental of safe-deposit boxes		400
Total income		$4,600
Less expenses and interest paid:		
Rent of building	$ 720	
Salaries	3,600	
4 per cent on savings accounts	1,200	
Stationery, postage, etc.	230	
Depreciation on equipment	200	
Total expense		$5,950
Deficit for the year		$1,350

Since most businesses, including banks, expect to run behind for a year or two after starting, the deficit in the first year's operations should not worry us unduly. This deficit

would have to be subtracted from surplus, and the balance sheet would appear as follows:

FIRST ANNUAL STATEMENT OF THE THRIFT SAVINGS BANK

Assets		*Liabilities and Ownership*	
Cash on hand	$ 200	Deposits	$60,000
Railroad bonds	28,000	Capital stock	25,000
Industrial bonds	30,400	Surplus	3,650
Mortgages on real estate	28,250		
Equipment	1,800		
Total	$88,650	Total	$88,650

During the second year, as the deposits and consequently the earnings increase, the bank may reasonably expect to have a small net profit which should be added to surplus. After three or four years of operation with steadily increasing net profits, a dividend may well be paid to the stockholders.

Why do not savers invest directly in bonds? — One of our depositors, learning of the operations of savings banks, wonders why any person should put his money in the savings bank at 4 per cent when he might get 6 per cent on his money by buying bonds for himself. He realizes that the savings bank simply invests his money for him and keeps the 2 per cent for expenses and profit. If a person investigated this question, he would undoubtedly find a growing tendency on the part of savers to buy bonds directly, especially since many investment houses are offering $100 bonds on the instalment plan. Nevertheless he would also find that many persons prefer to leave their money in the savings bank, even though it means accepting a lower return on the funds. He might find the following reasons for this preference for the savings banks:

First, a great many persons do not understand what a bond is. They may have heard of get-rich-quick schemes and conclude that all stocks and bonds are treacherous. These persons will continue to use the savings bank.

Second, even though a saver understands the nature of bonds and knows that there are sound as well as unsound bonds, he may distrust his ability to select the sound ones. Accordingly, he avoids all bonds.

Third, many persons want to have their savings where they can get them at a moment's notice. Of course, if the savings bank enforces the thirty-day notice, such persons must wait thirty days; but as a rule they can get their money whenever they ask for it. Naturally this fact is a powerful argument in their minds to place their money in the bank. They do not fully realize that if they own a bond which is listed on one of the leading stock exchanges of the country, they can have it sold and receive the cash in a day or two; or that if they prefer to borrow money, and not to sell the bond, they will find most banks ready to make them a loan, holding the bond as security.

Fourth, many persons like to feel that they are supporting a local institution, that they are loyal to their home town in helping build up the local bank. While this attitude is much more common in the small town than in the large city, it undoubtedly has some influence in swelling savings deposits, as against direct purchase of securities.

Fifth, the ownership of bonds involves risk or expense in taking care of the securities. Either the owner must keep his bonds around the house and run the risk of having them stolen, or he must rent a safe-deposit box in the bank and pay out part of his bond interest as rental for his place of safe-keeping.[1]

Sixth, and most important of all, it is usually inconvenient for persons of small means to purchase bonds. There are

[1] An exception to this is the "registered" bond. In this case, since the owner's name is registered on the books of the corporation, theft does not affect the ownership of the bond (see page 180).

few bond salesmen who visit and exhibit bonds to them. Neither are such persons, as a general rule, on the mailing list of the bond houses. Consequently they feel no impulse to investigate bonds, and there is no one on hand to close the sale at the right moment. On the other hand, the savings bank is ever before them; they are continually reminded of their duty to save, and it is little trouble to drop into the bank and make a deposit.

There is an increasing tendency for banks to have a supply of good bonds on hand and to offer these for sale to their customers. In this case it often happens that a savings depositor will put his money in a savings account until he has accumulated one hundred dollars, then buy a one-hundred-dollar bond from the bank and begin the accumulation of another savings account, adding his bond interest to his savings deposits. Such a saver will be surprised at the rate at which his pile of bonds grows. This practice is profitable to the bank because the bank buys these bonds at wholesale and retails them to its customers. It is probable that in the future this plan will be extended, and that many country banks, as well as city banks, will have on hand a well-selected list of bonds, educating their savings depositors in the purchase of these bonds.

B. The Different Kinds of Savings Banks

(Stock, mutual, and postal savings banks)

There are three different kinds of savings banks in the United States, namely: Stock Savings Banks, Mutual Savings Banks, and Postal Savings Banks.

Stock savings banks. — The Thrift Savings Bank set up in this chapter is an example of a stock savings bank, so called because shares of stock are sold to raise the capital, with the

result that the profits belong to the stockholders. There are few stock savings banks which do a pure savings-bank business and nothing more. The chief reason for this situation is that in the smaller towns where only one or a few banks exist, the banks must serve a wide range of needs of the community, including acceptance of checking accounts, making short-time loans to business men, selling bank drafts, and the many other duties which have come to be associated with what we call commercial banking. On the other hand, in the large cities banks are usually established either as commercial banks or as trust companies. But it is almost invariably the rule that these city banks operate a savings department and make an earnest effort to attract savings depositors. Thus the savings-bank business is generally a department in a commercial bank or trust company.

Mutual savings banks. — In some of our eastern states, particularly in New England, there are a considerable number of mutual savings banks. Such banks do not have any capital stock. The depositors are the owners of the bank, and all profits made are paid to the depositors as interest. The plan is to " pool " or merge the savings of a number of people, invest those savings profitably and with a minimum of expense, and return all the net earnings to the depositors. These mutual savings banks have succeeded admirably where the depositors know one another, expect to leave their savings intact for a considerable period of time, and are able to command the services of an investment expert for a moderate sum.

Postal savings banks. — For many years it was known that a large number of people, especially recent immigrants to this country, were hoarding their savings. These people either distrusted the banks in their communities, or found the banks so located that they could not conveniently deposit their savings in them.

In 1911 the Post Office began receiving deposits on which 2 per cent interest has been paid. The money taken in is either invested in government bonds or deposited in selected local banks, which pay interest to the Postal Savings System.

C. The Services Rendered by Savings Banks

(Receive deposits; pay interest; develop thrift; make loans; equalize interest rates)

Savings banks render services to savers and to users of funds. — The principal services of savings banks have been brought out already. They may be briefly stated as follows:

First, they provide a safe place in which to deposit savings, thus relieving the saver of the risk and worry involved in guarding his own savings.

Second, they pay interest on savings, thus enabling one's fund of savings to accumulate more rapidly than it otherwise would.

Third, they agree to return one's savings in cash whenever one desires.

Fourth, they educate the public in thrift; they show how saving protects a person in case of sickness, hard times, and old age; how the one who trains himself to save must neither depend on others nor come to want.

Fifth, they use the savings of the community to promote industry. Through their loans and investments, they provide capital for business purposes.

Sixth, they help to equalize interest rates in different investments and in different parts of the country. If interest rates are relatively high in one part of the country, such as the Middle West, or in one particular line of investment, such as public utilities, the savings banks try to place their funds in these localities or industries. This inflow of funds tends to

cause the high rates to fall and to come more nearly into line with the rate of interest in other fields of investment. Vast sums of savings of people living in the eastern part of our country have gone into the railroads, factories, power houses, and farm development in the western and southern parts of the nation. The savings banks of the East have played a considerable part in the transfer and investment of these savings. While the rate of interest in the various sections of the country and among the various industries will never be the same, owing chiefly to the different degrees of risk involved, yet the rate of interest is much more nearly the same than it would be if funds were not made mobile by such institutions as savings banks.

The first four of the above services aid more especially the savers, while the latter two are of importance especially to the users of funds, the borrowing members of society.

QUESTIONS

1. Why is the savings bank well suited to the needs of clerks and laboring people?
2. Why must there be a large number of depositors to make a savings bank profitable?
3. Are there probably more depositors in, than borrowers from, savings banks? Why?
4. If savings banks help to equalize rates of interest between the older and the newer sections of the country, what different groups of persons benefit?
5. Why are savings banks so frequently combined with commercial banks?
6. What advantages have mutual savings banks over stock savings banks? What disadvantages?
7. Why do savings banks seldom enforce the thirty- or sixty-day notice before withdrawal of deposits? Under what conditions would they be likely to enforce it?
8. Why do savings banks offer safety-deposit boxes for rent to the public? Could a shoe store install such boxes and offer this service just as efficiently and just as cheaply as a bank? Why, or why not?

9. "Savings banks are one of the many financial middlemen engaged in the great task of providing modern business with the funds necessary to carry on its operations." Explain.

10. "Savings banks are one of many specialized agencies taking care of the funds being saved by persons for the education of their children, for old age, for burial expenses, and for a thousand other future uses." Explain how this harmonizes with the preceding statement — 9.

TOPICS FOR FURTHER STUDY

THE WORK OF SAVINGS BANKS:

Willis and Edwards, *Banking and Business*, chap. XX.
Magee, *Materials of Banking*, chap. X.
Moulton, *Financial Organization*, Revised Edition, chap. XVII.
Phillips, *Readings in Money and Banking*, chap. XVI.
Holdsworth, *Money and Banking*, Fifth Edition, chap. XVII.

CHAPTER XIV

BUILDING AND LOAN ASSOCIATIONS

A. How Building and Loan Associations Bring Savers and Borrowers Together
B. The Building and Loan as an Investment for the Saver
C. The Future of Building and Loan Associations

While the savings bank serves many kinds of savers and borrowers, yet for certain purposes other institutions are needed. For the special purpose of aiding persons to acquire their own homes, building and loan associations have sprung up.

What a building and loan association is. — A building and loan association is a mutual, coöperative, financial institution, usually operating under articles of incorporation issued by the state, and composed of members who have thus associated themselves for their mutual benefit and financial advantage. The membership of a building association may be divided broadly into two classes, designated savings members and borrowing members. The former use the association as a place where they may deposit from time to time such sums as they are able to spare from their wages, salary, or other income. The borrowing members use the association as a place where they can borrow funds for use in buying, building, or repairing a home, or for any other useful purpose, and at the same time repay their loans systematically with their

savings. The members save money together; they lend money to one another; they divide their profits with one another.[1]

From this statement it is evident that a building and loan association resembles a savings bank in that both institutions gather up savings and transfer them to borrowers; both institutions pay interest to the savers; both charge interest to the borrowers. In certain respects, however, these two institutions differ. The chief differences are:

The *purpose* for which their loans are made. Savings bank funds find their way into a great variety of enterprises, while the building and loan association lends practically all of its funds for the purpose of buying or building homes.

The *persons* to whom loans are made. The savings bank places a large proportion of its funds in the hands of those who have no savings account in the bank, while the building and loan association makes loans to its own members only.

Associations operate under different names. — Associations have sprung up in different parts of the country during the past thirty to forty years and have assumed various names. Sometimes the state law authorizing and regulating them has stipulated what they should be called. While in a majority of states they are called *Building and Loan Associations*, in Massachusetts they are called *Coöperative Banks;* in New York, *Savings and Loan Associations;* in Louisiana, *Homestead Associations;* in a few other states, *Mutual Loan Associations.* Prefixed to these names one generally finds some such word as "Peoples," "Security," "Citizens," or the name of the town or city where they do business.

[1] Adapted by permission from a statement by Henry S. Rosenthal, editor of the *American Building Association News.*

A. How Building and Loan Associations Bring Savers and Borrowers Together

(Operation of the savings department; of the loan department; management of an association)

We have already observed that a building and loan association has two classes of members: saving members and borrowing members. A building and loan association operates, therefore, a savings department and a loan department. While associations in different states follow somewhat different plans of operation, the main features are much alike and may be shown by the following illustration.

How the savings department operates. — Suppose that a person, hearing that the local building and loan association will take his savings and give him 6 per cent interest on them, decides to investigate. He enters the office of the association on Saturday evening and sees persons turning over their money to a clerk and the clerk putting down the amounts in their "pass books." In answer to his questions, the clerk explains that the association operates like a savings bank, the members bringing in certain amounts each week or month and having those amounts entered in the books to their credit. He learns that "membership" is only another word for "depositor"; that the members do not meet and elect other persons to membership, but that anybody is welcome to become a member if he will agree to save a definite amount regularly. He also discovers that these regular savings are called "payments on shares of stock," as if the member were buying shares of stock on the instalment plan. The clerk explains that the shares of stock are of $100 par value, and that a member pays 25 cents a week on each share subscribed for; in 336 weeks he would have paid in 336×25 cents, or $84, but the accumulated interest or dividends on his payments

would amount to $16, or sufficient to complete the $100, so that at the end of 336 weeks his share would be fully paid for. He could then either take his $100 in cash or leave it in the association to accumulate further interest. This interest paid to savings members comes from the earnings of the association minus the running expenses. If the earnings are high and the running expenses are low, each member will receive high interest on his savings, and this will "mature the shares" in a shorter time. Hence the amount of interest or dividends a savings member gets depends on the income of the association and its running expenses. Most associations are able to pay around 6 per cent to savings members, which matures the shares in about 336 weeks.[1]

The inquirer is also told that he may withdraw his savings at any time, although the association has a rule similar to the rule of savings banks, that thirty days' notice may be required. Since the association lends its money as fast as it comes in, there is very little cash on hand at any given time. If a considerable number of members asked to withdraw their savings at one time, it might be necessary to enforce the thirty-day notice. The clerk also explains that the members have a meeting once a year for the purpose of electing a board of directors; that the directors have general supervision over the association and serve without any pay; and that the directors elect the officers (president, vice president, and secretary-treasurer), of whom only the secretary-treasurer receives compensation. Thus the association is a mutual, coöperative affair, owned and managed by savers. The clerk also points out that the associations in that particular state are under the supervision of the same state officials that supervise state banks.

[1] In Massachusetts, New Jersey, and some other states the par value of shares is $200, in which case it takes about twice as long to mature a share.

How the loan department operates. — Let us assume that Bates desires to build a home. He owns a lot worth $1,500 and has $1,000 in the bank to apply toward the house. He needs $4,000 more, and asks the building and loan association for this amount. The officers are satisfied that his property will be worth $6,500 when his house is completed, and agree to make the loan. The money loaned comes from those who are paying regularly to the savings department. Instead of signing an ordinary promissory note, promising to pay the $4,000 at the end of, say five years, and interest every six months, Bates must subscribe for forty shares of stock, par value $100 each, and agree to pay 25 cents weekly on each share. In addition to the $10 a week paid on his shares he pays the interest each week on his loan. Interest for one week on $4,000 at 6 per cent would be $5, so Bates would agree to pay $15 a week to the association. Bates thus does business each week with both departments of the association. To the loan department he pays interest on his loan, but nothing toward the principal. To the savings department he pays $10 a week toward his forty shares. When his forty shares are fully paid for, the shares worth $4,000 are turned over to the loan department to pay off the principal of his loan, and he owns his home free of debt. Bates realized the following advantages from the plan:

(*a*) His loan was so arranged that he did not need to worry about renewals of the loan, with their attendant commission charges.

(*b*) He paid off his loan by weekly savings, thus permitting him to get out of debt by a method adapted to his income.

(*c*) He obtained his loan at a reasonable rate of interest.

Associations may be managed quite economically. — A group of persons interested in forming a building and loan association may do so by obtaining a charter from the proper

state authorities. Frequently the individual who aspires to be chosen secretary-treasurer of the association is the one who takes the initiative in organizing a new association.

After an association is organized, the running expenses may be quite low. The secretary-treasurer is usually the only officer who receives compensation for his services. Clerical assistants will look after such details as recording deposits in members' pass books, collecting and recording interest paid by borrowing members, depositing funds in the bank pending the loan of such funds to members, and keeping the books of the association. Whereas custom has come to require of banks an expensive building with elaborate furniture, fixtures, and vaults, such is not the case with building and loan associations. An office, adequate for the needs of an association, may be rented for a modest sum. Other expenses, such as advertising and taxes, are usually small. On the whole, the total operating expenses of a typical association are, therefore, low. This tends to make the investment in such associations more profitable to the members than in an organization with heavy expenses.

Associations have minor sources of income. — Most building and loan associations, in addition to interest collected on loans, receive income from one or more of the following sources:

(*a*) *Entrance fees.* — A small fee, say 25 cents per share, is charged by many associations. This helps defray the cost of securing the new business and of opening the books for a new member.

(*b*) *Fines.* — Members who get behind in their payments are required by some associations to pay a small fine or penalty. While this may be an injustice to those who get behind through misfortune, it serves as a stimulus to promptness to those who are merely careless.

(*c*) *Forfeitures.* — When a member drops out before completing payment on his shares, he may be required to forfeit part of the interest that would otherwise be paid him on his savings. This is justified partly on the ground that additional expense may be incurred in closing his account before his shares are matured, and partly on the ground that the loans made with this member's money have not yet been repaid and losses may occur from which the retiring member would be exempt if he were paid full interest. As a matter of fact, losses are quite infrequent, and these forfeitures really amount to penalties for withdrawal. The interest so withheld is given to the members who pay until their shares mature.

These minor sources of income are sometimes sufficient to pay the running expenses of the association, in which case all of the interest paid by the borrowers goes to the savers.

B. The Building and Loan as an Investment for the Saver

(High interest returns; low risk; encouragement to systematic saving)

When a person considers joining an association, he is interested in knowing whether he is getting a good investment. A carefully managed building and loan association may claim that it is a good investment because it pays a relatively high rate of interest on savings; it is safe; and it requires one to save regularly and systematically.

Building and loan associations pay relatively high returns on savings. — As we have seen, a member may expect to receive about 6 per cent interest on his savings. This is a *relatively* high return, considering the risk involved. Where the risk in an investment is small, the returns are generally low; for example, United States government bonds ordinarily bear 3 to $3\frac{1}{2}$ per cent interest because lenders feel that their money

is absolutely safe. When our government offered 4 to 4½ per cent interest as it did during and immediately after the World War, lenders spoke of the "high return on government bonds," meaning that it was high considering the small risk involved in lending to the government. On the other hand, 7 or 8 per cent might be considered a low return on money invested in a mining enterprise, because high risk attends most mining investments.

Building and loan officials claim that there is low risk involved in investments in these associations. There are two evidences of this low risk: (*a*) the character of the loans made by these associations and (*b*) the small number of failures among these associations.

(*a*) *The character of loans.* — Assuming that the officers are honest, the safety of members' savings depends upon the safety of the loans made. As stated before, these associations confine their loans almost exclusively to home buyers and builders. They are cautious as to how much they lend to one person, a common rule being to lend not more than 65 or 70 per cent of the value of the property in each case. Since the association always holds a mortgage as security for the loan, there is little danger of loss, even though the borrower cannot meet his payments. The borrower steadily reduces his debt by weekly or monthly payments, hence each loan grows less and therefore safer, the longer it runs.

It is a rare occurrence for an association to be compelled to take over a home under its mortgage rights, and still rarer for it to suffer any loss when it does take over a home and offer it for sale.

(*b*) *The number of failures.* — There have been comparatively few failures among these associations. Their record is much better, for example, than that of banks. During the seven-year period 1920–1926, the number of banks failing in

the United States was 3,108, an average of 444 per year. During the same period the building and loan association failures numbered 77, an average of 11 per year. Dividing the average number failing each year by the number in business each year, we find that 1½ per cent of the banks failed annually, while only one tenth of 1 per cent of the associations failed annually.

In the year 1927 there were 824 bank failures out of 27,061 banks, and 21 building and loan association failures out of 12,900 associations.[1] In other words, while banks were about twice as numerous, their failures were 39 times as numerous as those of building and loan associations. Judging from the evidence in recent years, therefore, it seems clear that *on the average* a person's savings are just as safe or safer in a building and loan association as in a bank.

Building and loan associations encourage systematic saving. — Another advantage of the building and loan association is that it requires its members to pay in a specified sum weekly or monthly. These regular payments make saving a habit. Habitual, systematic saving means that more will be saved and with less sacrifice than when unsystematic saving is practiced. Systematic saving is especially important for those receiving moderate incomes. Unless they learn to lay aside a small sum each pay day, they may never save anything.

C. Future of Building and Loan Associations

(Rapid growth in recent years; better supervision likely)

Recent growth has been remarkable. — In their earlier years these associations grew slowly. Between 1893 and 1902 they made a small gain in membership and added only about

[1] All data are from the reports of the Comptroller of the Currency, 1927, and United States League of Building and Loan Associations, 1928.

$100,000,000 to their assets, while more associations went out of business than were started. The figures are: [1]

Year	*Number of associations*	*Members*	*Assets (Practically all loans)*
1893	5,598	1,359,366	$473,137,454
1902	5,209	1,530,707	577,228,014

By 1911, the movement had grown to about twice the strength it had in 1893, the assets being a little more than twice as large while the membership had not quite doubled. By 1919, however, the assets had again doubled, while membership was little short of twice the figures of 1911. The next doubling occurred in five years, or by 1924. Since 1924 the growth has also been quite rapid. The figures are as follows:

Year	*Number of associations*	*Members*	*Assets*
1911	6,099	2,332,829	$1,030,687,031
1919	7,788	4,289,326	2,126,620,390
1924	11,844	8,554,352	4,765,937,197
1928	12,666	11,995,905	8,016,034,327

If the present rate of growth is maintained for the next five to ten years, the building and loan association will become one of the three or four largest and most important financial institutions in America.

Better organization and supervision will come. — Some associations are much better organized and managed than

[1] All figures are taken from Annual Reports of Secretary Cellarius, of United States League of Local Building and Loan Associations.

others. The methods employed in the best associations should be transplanted into the others. State laws providing for supervision are being improved, often at the solicitation of the associations themselves. That the organizations to be regulated are asking for stricter regulation is a wholesome sign.

Summary. — To assist persons to own their own homes, building and loan associations have developed and spread widely. These associations serve savers by providing a safe investment, yielding a high rate of interest, and calling for regular, systematic saving. They appeal especially to persons receiving regular but moderate incomes. The savings paid in are loaned to members who are acquiring their own homes. These borrowing members pay off their loans in regular installments. The associations operate on the mutual or coöperative principle, in accordance with which, after running expenses are paid, all earnings go to members.

QUESTIONS

1. How does a building and loan association resemble, and how does it differ from, a savings bank?

2. Is the building and loan association more nearly like the mutual savings bank or the stock savings bank? Give reasons for your answer.

3. Illustrate what is meant by systematic saving. What other kind of saving is there? Is systematic saving better adapted to clerks or to farmers? To wage earners, or to those who receive income only when they make a sale, such as real estate men?

4. Why are there comparatively few failures among building and loan associations?

5. "In building and loan associations all borrowing members are savings members, but not all savings members are borrowing members." Explain.

6. Suppose you were responsible for increasing the membership of a building and loan association.

(*a*) Among what classes would you find your best prospects? Would the following be good prospects: farm hands, stenographers, clerks, bank presidents?

(*b*) What arguments would you use to get your prospects to join? Would you use the same arguments on everybody? If not, what would be responsible for yo- - changed approach? Illustrate.

(*c*) If Jones asked you what returns he could expect on his savings, how would you explain the fact that there can be no percentage set in advance for the members?

(*d*) If Smith asked you how he could use the association to help him finance the purchase of a home, how would you explain matters to him?

7. Advocates of these associations claim that the man saving ten dollars cannot lend it to another on mortgage security, as can the man saving a thousand dollars because ten-dollar mortgage loans are never made. By joining one of these associations his ten dollars is united with the savings of hundreds of others and placed in a first mortgage loan. This gives the ten-dollar saver all the advantages of good security and profitable returns that are obtainable by the wealthy man. Do you agree? Might the member even have an advantage over the wealthy man because the association relieves him of the time and trouble of making the loan, collecting the interest, and reinvesting the money when it is paid back, whereas the wealthy man must look out for these things himself? Suggest other advantages a member may have over a wealthy nonmember.

8. If building and loan associations are performing such valuable services to society, why do we not hear them spoken of more frequently?

9. In some cases building and loan associations are organized by men whose chief interest is selling real estate. How could such men turn business to a building and loan association? How could an association develop business for a real estate man?

10. Show that building and loan associations are both competitors of, and aids to, savings banks. Bankers are sometimes found on the board of directors of building and loan associations. Why should associations want bankers on their board of directors? Why should bankers agree to serve on these boards?

11. The Building and Loan Commissioner of California, in his annual report for 1926, says, "The rates of interest charged upon loans range from 7 per cent to 12 per cent per annum, depending on locality, security offered, and local money conditions. The average rate charged was 8.65 per cent. The average rate of dividends paid on instalment shares was 6.89 per cent."

(*a*) How do these rates compare with the rates prevailing in building and loan associations in your community? Account for the difference.

(*b*) Show the connection between the rate charged borrowers and the rate paid to savers.

TOPICS FOR FURTHER STUDY

Operations and Services of Building and Loan Associations:

Moulton, *Financial Organization*, Revised Edition, pp. 676–681.
Moulton, *Money and Banking*, Part II, pp. 354–362.
Rosenthal, *Building, Loan and Savings Associations*, chaps. I–VI.
Chase and Clark, *Modern Building and Loan Associations*.

CHAPTER XV

MORTGAGE COMPANIES AND LAND BANKS

A. How Mortgage Companies Operate
B. Services Rendered by Mortgage Companies
C. How Land Banks Operate

In the preceding chapter we saw how the building and loan association served the needs of persons desiring to own their own homes. Building and loan associations are not designed to assist persons in building hotels, office buildings, and apartment houses. Neither do such associations, as a rule, aid men in buying farms, draining their land, and erecting farm buildings. These needs are being met by other financial institutions, and especially by the type known as the mortgage company.

A. How Mortgage Companies Operate

(Making loans on city residences; on business structures; on farms)

Mortgage companies operate both in the cities and in the rural districts. Those operating in cities are commonly known as real-estate bond houses, because in connection with most of the buildings which they aid in financing, they sell bonds secured by the real estate. Their methods of operation may be illustrated first, by a loan on a single residence, and second, by a loan on a business structure.

How mortgage companies make loans on single residences in cities. — Suppose that Jones desires to build a house, costing, with the lot, $7,500. He cannot borrow the entire

amount, since lenders ordinarily insist that the owner furnish part of the funds so that there will be a margin of safety protecting the loan. If Jones has $2,500 of his own, he should have no difficulty borrowing the other $5,000.

There are, as we have seen, other sources to which Jones may turn for the loan besides a mortgage company. He may join a building and loan association; he may obtain the loan directly from a personal friend; he may be accommodated at his local bank; he may borrow from an insurance company. All of these sources are used by various borrowers, at various times and places. Which source will be used in a particular case depends upon such factors as convenience, cost, and the method of repayment preferred by the borrower. For example, if Jones should find a mortgage company accessible and convenient, he might use it rather than some other source of funds which involved trouble and time for investigation. Another borrower might investigate the cost of a loan from the various sources and decide, for the sake of economy, to borrow from an insurance company. Still another might desire, above all, to pay off his loan in weekly instalments; for that reason he might use the building and loan association.

Assuming that Jones deals with a mortgage company, he will sign an application for the loan of $5,000. If the loan is granted, Jones will sign a promissory note, promising to repay the money in perhaps five years, with interest at, say, 6 per cent a year. As security for the loan Jones will give the company a mortgage on his house and lot. Jones will pay the mortgage company a commission or fee of perhaps 5 or 10 per cent of the amount of the loan for its services. Then the mortgage company will sell the promissory note and the accompanying mortgage which it took from Jones. The company will find a buyer for Jones's mortgage note among

the following: life insurance companies; trust companies; savings banks; guardians and trustees of estates; individual investors. This sale of the mortgage note brings back to the mortgage company the funds it had advanced to Jones, and the company is then prepared to make another loan, perhaps to Smith or Brown. The profits of the mortgage company are made from its commission and fees.

How mortgage companies make loans on business structures in cities. — When it comes to business structures, such as apartment houses, hotels, and office buildings, the same principles apply as in the case of Jones's loan on his residence, with one exception. Jones's loan was of such an amount that one person could easily be found to buy the note from the mortgage company; in the case of a loan to the owner of a business structure the amount is generally so large that it is difficult and sometimes impossible to find one person who will take the loan off the hands of the mortgage company. It therefore becomes necessary for the mortgage company to break up the loan and sell parts of it to different investors.

A hotel company, for example, prepares to build a new hotel, the building and land estimated to cost $10,000,000. The company provides 40 per cent, or $4,000,000, from other sources, chiefly from its stockholders. It applies to a mortgage bond house for a loan amounting to 60 per cent of the cost, or $6,000,000. The mortgage company examines the plans for the hotel, possibly suggesting changes which will improve the earning power of the building. A loan agreement is drawn up and signed by the two parties, providing that the mortgage company shall advance funds to a total of $6,000,000 as construction of the hotel moves forward, while the hotel company promises to repay the loan in instalments over a period of years, to pay interest from time to time on the

We Offer, When, As and If Issued and Received by Us

$6,000,000

AMBASSADOR HOTEL

Located at Los Angeles, California

First Mortgage 6% Sinking Fund Gold Bonds

Dated: March 21, 1927 Due: March 21, 1943

We recommend the bonds described herein as an investment of the soundest character, yielding an attractive return, and call attention to the following chief features of this issue:

1 Los Angeles is the financial, commercial and industrial center for Southern California and the Southwest. It is one of the six largest cities of the United States and one of the most rapidly growing. It holds eighth place in value of manufactured products and is one of the leading seaports of the country.

2. The Ambassador Hotel of Los Angeles enjoys a world wide prestige and is recognized as one of the outstanding successes among hotels of the United States. In the six years since its opening it has established a distinctive international reputation and a clientele of the highest character.

3 The net earnings for 1926, as certified by Messrs. Haskins & Sells, Certified Public Accountants, after redistribution of major repairs and renewals, available for interest, Federal Income Tax, and depreciation were $827,604.92 which sum is approximately 2¼ times the greatest annual interest charge.

4 The property is appraised at $10,145,014, which is $4,145,014 more than the amount of the first mortgage and makes this issue only 59.2% of the appraised value.

5 The operation of an annual sinking fund is calculated to reduce this issue at maturity to an amount equal to less than 68% of the present appraised value of the land, without taking into consideration improvements which are appraised at $3,032,014.

6 The large margin of security and earnings which protect these bonds make them a conservative investment yielding an attractive rate.

◆ ◆ ◆

S. W. STRAUS & CO.

ESTABLISHED 1882 INCORPORATED

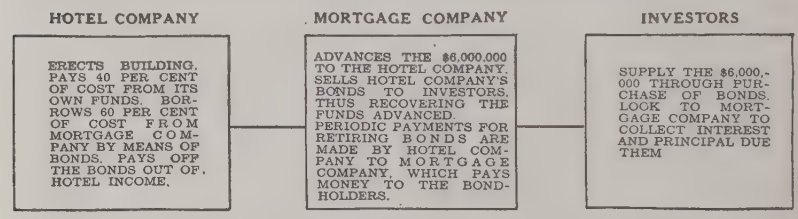
Investment Bonds

CIRCULAR OFFERING REAL ESTATE MORTGAGE BOND

unpaid balance of the loan, and to safeguard properly the loan by such measures as keeping the property in good repair and carrying insurance on the building.

Having made the loan of $6,000,000, the mortgage company proceeds to sell the loan in order to recover its money. The amount being large, it is necessary to break the loan into pieces, so to speak. This is done by creating bonds in denominations of $100, $500, and $1,000. These bonds are then sold to investors.

The three parties involved may be shown as follows:


HOTEL COMPANY
ERECTS BUILDING. PAYS 40 PER CENT OF COST FROM ITS OWN FUNDS. BORROWS 60 PER CENT OF COST FROM MORTGAGE COMPANY BY MEANS OF BONDS. PAYS OFF THE BONDS OUT OF HOTEL INCOME.
MORTGAGE COMPANY
ADVANCES THE $6,000,000 TO THE HOTEL COMPANY. SELLS HOTEL COMPANY'S BONDS TO INVESTORS, THUS RECOVERING THE FUNDS ADVANCED. PERIODIC PAYMENTS FOR RETIRING BONDS ARE MADE BY HOTEL COMPANY TO MORTGAGE COMPANY, WHICH PAYS MONEY TO THE BONDHOLDERS.
INVESTORS
SUPPLY THE $6,000,000 THROUGH PURCHASE OF BONDS. LOOK TO MORTGAGE COMPANY TO COLLECT INTEREST AND PRINCIPAL DUE THEM

The Mortgage Company as a Middleman

For its work of investigating the project of the hotel company, improving the plans, seeing that the building is constructed according to specifications, advancing the funds, selling the bonds, collecting the interest and instalments on the principal and paying these amounts to the bondholders, the mortgage company collects a commission or fee from the hotel company.

The second mortgage is sometimes used. — A conservative mortgage company prefers not to lend over 65 or 70 per cent of the value of the property. If the owner desires to borrow more than the mortgage company has loaned him on the first mortgage, he may go to an individual or to a second-mortgage company and borrow more. This second loan, secured by the same property which has already been mortgaged for the first loan, is obviously not as safe as the

first loan. In case the borrower fails to pay and the property is sold, the first-mortgage loan must be paid in full before the second-mortgage loan is paid anything. This greater risk involved in second mortgages, combined with the fact that the

Courtesy S. W. Straus & Co.

GENERAL MOTORS BUILDING — DETROIT

Real-estate mortgage bonds were used to help finance the construction of this building.

market for second-mortgage loans is not well organized, makes the rate of interest prevailing on second-mortgage loans higher than that on first-mortgage loans. Likewise the commission for making the loan is higher. Where a borrower pays perhaps 8 per cent yearly to cover all the costs of a first-mortgage loan, he will pay probably 15 to 20 per cent yearly on a second mortgage loan.

How mortgage companies handle farm loans. — Mortgage companies operating in the country districts get in touch with borrowing farmers through offices and agents in rural communities. The arrangements made are similar to those applying to city loans. The farmer, if he owns a farm, can give a mortgage on the land and buildings to secure his promissory note. The note is generally made to run for either three or five years, and interest is payable each year or half year. The money is paid over to the farmer by the mortgage company and then the mortgage company sells the note and the accompanying mortgage to some investor. The commissions and fees charged the farmer are the source of the mortgage company's profits.

B. Services Rendered by Mortgage Companies

(Aid real-estate improvements; provide mortgage investments for savers; look after the details of loans)

From the foregoing illustrations we see that mortgage companies are really society's financial middlemen, connecting and serving both borrowers of funds (property owners) and lenders of funds (savers). As specialists in mortgage loans, they have developed a thorough technique of investigation, analysis, purchase, and sale of mortgage paper. Unfortunately, some mortgage companies do not deserve to be called specialists. They have no trained experts on their staff. They are interested only in quick profits, not in building a reputation for honesty and fair dealing. There are, however, houses that are managed by trained specialists, interested not only in profits, but also in creating safe investments and in aiding builders. These larger and better companies, usually organized as real-estate bond houses, render the services here discussed.

Real-estate bond houses aid improvements in cities. — The financing of the hotel previously described shows how real-estate bond houses aid new buildings. The larger houses, however, do more than merely advance funds to builders. Through their architectural and engineering departments they help shape the plans of new buildings. Many of the projects presented to a real-estate bond house are unsatisfactory security for a loan. The fault may be that a good building is being put in the wrong place; it may be that a poor building is being put in the right place; it may be that the floor layouts are badly planned. Whatever the faults, it is the business of the mortgage-bond house to correct them. To that end the architects and engineers on the staff of the bond house direct their efforts. If they succeed, the property becomes a satisfactory security for a loan. This means that mortgage-bond houses have much to do with determining the type of improvement that will be made in various locations. They are an important agency in determining the appearance and development of our cities.

Mortgage companies furnish to savers an outlet for their savings. — Mortgage companies' profits depend on their loans; hence they are on the lookout for desirable loans. The funds for these loans come ultimately from savers who desire to place their money in mortgage investments. Many investors regard a conservative mortgage loan as an ideal investment. By a conservative mortgage loan they have in mind two things especially:

(1) That the amount of the loan should be considerably less than the value of the property. In a community, for example, in which property values are stable, if a certain lot and building are worth $50 000, a loan of $25,000 to $30,000 would be considered conservative, while a loan of $40,000 would probably not be considered conservative.

FUNCTIO 'S OF THE ENGINEERING DEPARTMENT

First: To appraise the cost of a proposed building for the guidance of the Loan Department in determining what value to ascribe to the building as security for the proposed loan.

Second: To determine proper or standard requirements commensurate with the type of building, to be incorporated in the loan agreement.

Third: To revise equipment and finish specifications in order to give the borrower the benefit of our experience.

Fourth: To check foundation conditions and structural features of the building in order to assure safety.

Fifth: To test and approve all types of building materials entering into the construction of the building.

Sixth: To assure by frequent field inspections that the building is actually built —

(*a*) In accordance with the standard requirements that have been incorporated in the loan agreement;

(*b*) In accordance with the architect's plans and specifications;

(*c*) In accordance with the time schedule.

Seventh: To evaluate the labor and materials incorporated in the building at various stages during the construction process in order to determine the advances to be made to the borrower under the loan agreement.

Courtesy S. W. Straus and Co.

How the Engineers of a Mortgage Bond House May Aid Builders

FUNCTIONS OF THE ARCHITECTURAL DEPARTMENT

First: To study the plans submitted with a view to revising them, in order to obtain the most economical and most efficient layout, emphasis being laid upon the renting point of view. In the case of an office building, this means the greatest amount of usable, properly lighted floor space, proper traffic conditions, and adequate service facilities. In the case of an apartment project it means the maximum number of rooms of adequate size with adequate light, ample closet space, cross ventilation where possible, and proper traffic conditions.

Second: To check exterior design and design of interior public spaces.

Third: To determine, for the purpose of estimating cost and income, the cubical contents of the building and the number of rooms or the square feet of rentable area.

Courtesy S. W. Straus and Co.

How the Architects of a Mortgage Bond House May Aid Builders

(2) That the interest on the loan should be considerably less than the income from the property. Thus, if the interest on the loan required $3,000 a year, and the owner of the property got a net income of $6,000 to $10,000 from the property, the loan would be considered conservative.

In other words, in both principal and interest, the lender wants a wide margin of safety, so that if anything should happen to the borrower, the lender would be amply protected.

Since mortgage loans typically mature three to ten years after the loan is contracted, they are a rather long-time investment, and are sold to investors who desire to invest

their funds for a rather long period. Persons who wish to avoid the task of reinvesting their funds every few months are the persons looking for such long-time investments. Such persons include not only many private individuals and corporations, but certain financial institutions as well. Especially heavy investors in mortgage loans are the insurance companies, savings banks, and trust companies. These institutions have considerable money committed to their care which will not be withdrawn for a long time. For this reason they can and do make investments in mortgage loans. While many of their loans are made independently, in some cases they buy from mortgage companies.

Mortgage companies also look after the details of loans. Investors are generally glad to have mortgage companies do this, since investors, as a rule, have neither the facts needed, nor the inclination to analyze the details of loans. The principal details involved are:

1. The appraisal of the value of the property. If the loan is to be conservative, it is important to obtain expert appraisals, or estimates, of the market value of the land and improvements. Mortgage companies usually employ experts on real-estate values to make appraisals of property which is offered as security for a loan. These experts can make a better appraisal than the average investor can make.

2. Seeing that the title is clear. It is important to know whether the one asking for the loan is the real owner of the property, since only the owner can mortgage the property. To determine who holds title to a piece of property requires investigation by experts. In some mortgage companies experts are employed to make these investigations. In other cases they rely upon title-guaranty companies which offer, for a fee, to guarantee that the title to a particular piece of property is held by a particular person. In case any trouble

arises over the title, the guaranty company assumes the responsibility for settlement.[1] Whichever method of title investigation is used, investors are relieved of the burden of making an investigation.

3. Execution of the mortgage. Seeing that the mortgage is properly made out, signed, and recorded in the county records can be performed more satisfactorily by the legal staff of a mortgage company than by the average investor. Particularly is this true if the investor lives outside the community in which the mortgaged property is located.[2]

4. Seeing that the taxes and insurance are kept paid up by the owner. Taxes must be paid or the state may seize and sell the property. Insurance must be provided against destruction of the building or its earning power. The burden of looking after these things is on the owner, but owners are frequently careless and need to be reminded of their duty. Mortgage companies generally watch these matters when they have made a loan on a piece of property.

5. Collection of interest and principal when due. Mortgage companies watch the dates when interest and principal are due and demand payment promptly. If payment is not made, they have their collectors and lawyers press the claim and, if necessary, exercise the rights given in the mortgage to have the property sold in order to satisfy the claim.

In 1929 a Real Estate Securities Exchange was opened in New York City. This is a market place where real estate securities, chiefly bonds, are bought and sold. This exchange makes it possible for an investor quickly to convert his real estate securities into cash or to buy securities desired. It

[1] This system of insuring titles to property is more fully explained on page 317.

[2] The purpose of recording the mortgage in the county records is to give legal notice to the public that a mortgage has been placed on that particular property

operates on the same general principles as the New York Stock Exchange (described in Chapter XXI).

C. How Land Banks Operate

(Defects of old mortgage system; remedies offered by land banks; operation of Joint-stock and Federal land banks)

During the past half century there has been steady improvement in the business of making mortgage loans in our cities. The development of the real-estate bond house has done much to place the city mortgage business on a more efficient basis. Another factor has been the remarkable growth of our cities, causing land values to rise, thereby making mortgage loans safer. The result is that city property owners, as a rule, are now in a position to borrow money on mortgage security at reasonable rates of interest and with terms of repayment adapted to their particular circumstances.

No such development has occurred in the farm-mortgage business. Farm lands have not had, generally speaking, the striking growth in value that has attended city lands. Furthermore, the returns from agriculture are more uncertain than from most city property. There has not been, therefore, so great an inducement for capital to enter the farm-mortgage field, nor for specialists to organize the business in a more scientific way. As a result, the farm-mortgage business has not been well adapted to the farmers' needs.

Objections to the old farm-mortgage system. — In two respects, particularly, the farm-mortgage system has proved defective: in cost, and in method of repayment.

The *cost* has been too high. Most farm-mortgage loans were contracted to run for three or five years. When the loan fell due, the farmer almost invariably had to ask for a renewal. This meant the payment of another set of commissions and fees. When these expenses were added to the

interest charges, farmers were paying, in many cases, 10 to 12 per cent a year, and in some cases, 15 to 20 per cent a year for loans. Considering the risk to lenders involved in these loans, such rates were too high.

No suitable *method of repayment* was provided. The practicable way for most farmers to get out of debt is to pay an instalment on the principal of the debt each time they sell their principal crop or product. For the wheat or cotton farmer this would mean once a year. For the dairy or fresh produce farmer it might mean monthly instalments. But the mortgage companies were not interested in arranging for instalment payments. They made more profits if the farmer renewed his loan frequently.

The Federal Farm Loan System aims to correct these weaknesses. — The failure of mortgage companies to provide adequately for the needs of farmers caused Congress in 1916 to pass the Federal Farm Loan Act. This act established a new type of mortgage company, known as the "land bank." Land banks are set up to lend money to farmers at reasonable rates of interest and on such terms that the farmers gradually work out of debt by paying an instalment on the principal of the loan every six months when they pay interest on the loan. A group of men called *The Farm Loan Board*, appointed by the President of the United States, has general supervision over the system. There are two forms of land banks, similar in fundamentals but different in certain important details. The two forms are:

1. Joint-stock land banks
2. Federal land banks.

Joint-stock land banks deal directly with farmers. — The Farm Loan Act provides that ten or more citizens, investing jointly at least $250,000 as capital, may apply to the Federal

Farm Loan Board for a charter. If granted, the bank is organized. Each bank is empowered to make mortgage loans to farmers in the state in which the bank is located and in one adjoining state. The bank gets in touch with borrowing farmers through agents located in the rural communities.

If farmer Brown wants a loan from a joint-stock land bank, he fills out an application blank. An appraiser from the land bank appears in due time to determine the value of Brown's farm, since the law says that the loan must not exceed 50 per cent of the value of the land plus 20 per cent of the value of the buildings and other permanent improvements. Assuming that Brown's land is worth $12,000 and his improvements are worth $10,000, he could borrow up to $8,000 (50 per cent of $12,000 plus 20 per cent of $10,000 equal $8,000). Then the title to the land is carefully examined, since loans are made only to owners of farms, never to tenants. If all conditions are met, Brown gets his loan upon signing the promissory note and the mortgage. The note may run anywhere from five to forty years as best suits Brown, and requires Brown to pay an instalment on the principal every six months when the interest payments are due. In this way Brown will work out of debt gradually, and expensive renewals of his loan will be avoided. Thus one of the evils of the old mortgage loan system is remedied.

The other evil, the high cost of the loan, can be analyzed by following Brown's loan through to the head office of the joint-stock land bank.

Previous to lending money to Brown the joint-stock land bank had obtained a large sum of money from the investing public by selling its bonds, part of which sum is then loaned to Brown. These bonds are obligations of the joint-stock land bank and are secured by the notes and mortgages given

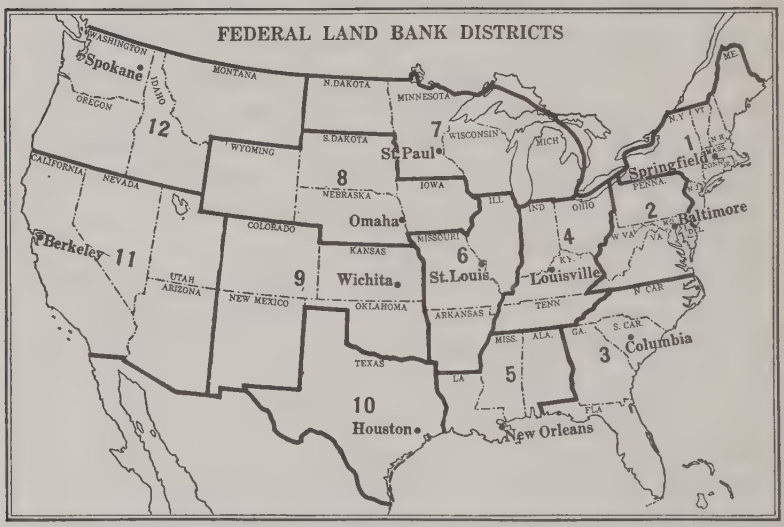
by farmers to the land bank. Now, a peculiar thing about these land-bank bonds is that the United States government has ordered that they be exempt from taxation. This makes the bonds highly attractive, especially to wealthy persons who wish to avoid heavy income taxes. These bonds are therefore eagerly bought, even though they pay a rather low rate of interest, say $4\frac{1}{2}$ per cent. Since the land bank can raise funds at a low rate of interest, the government requires it to lend its funds to Brown at a low rate of interest. The law says that the land bank must keep its interest charge to Brown within 1 per cent over the rate the land bank pays to get the funds. For example, if the land bank obtains the funds by paying $4\frac{3}{4}$ per cent interest to the investing public, it must lend to Brown at $5\frac{3}{4}$ per cent or less. The 1 per cent difference is kept by the land bank for expenses and profit.

By the time Brown has added to this interest charge the other expenses of his loan, namely, for appraising the value of his farm, investigating the title, executing the mortgage, and so on, the total cost usually runs between 6 and 7 per cent a year. Thus the second evil connected with the old mortgage system has been remedied.

Federal land banks lend through local associations of farmers. — In addition to joint-stock land banks, the law of 1916 created twelve Federal land banks, one being placed in each of twelve districts of the country. The primary purpose in creating these Federal land banks was to encourage farmers to coöperate in their borrowing. It has been demonstrated in Europe that certain important savings can be effected by coöperative borrowing; such savings as lower interest rates, lower fees and commissions, and fewer losses from bad loans. Our Congress, desiring to encourage this sort of borrowing, authorized the formation of local associations of farmers, known as "National Farm Loan Associations." These local

loan associations deal with the Federal land bank of their district.

If farmer Brown desires to borrow from the Federal land bank, he joins a national farm loan association in his community. Ten or more farmers, desiring to borrow, may form such an association. The secretary of the local association takes Brown's application for a loan and forwards it together



with other applications, to the Federal land bank. If the loans are granted, the secretary, upon receipt of the money from the land bank, turns it over to Brown and the other borrowing farmers. Other details, including collection of interest and of the instalment due on the principal twice a year, are looked after by the secretary.

The terms of loans made by Federal land banks are similar to those made by the joint-stock land banks. Accordingly, the funds loaned to Brown by the Federal land bank come ultimately from the investing public who purchase tax-exempt

bonds issued by the Federal land bank. The cost of the loan to Brown will be approximately the same, whether he deals with the joint-stock land bank or with the Federal land bank. Whichever is the more convenient will probably obtain Brown's business.

The Federal land banks are owned by the local farm loan associations of the district, and are operated by a board of directors, chosen in part by the local associations and in part by the supervising board at Washington — the Federal Farm Loan Board.

Thus both the joint-stock and the Federal land banks are actively engaged in the task of transferring the funds of investors into the hands of farm owners who desire to pay off old mortgages, buy new land, or make permanent improvements on their farms. Such funds are furnished to the farmers, not only at lower rates of interest than they paid formerly on mortgage loans, but also on terms of repayment better suited to farmers' incomes. In so doing, land banks may well claim credit for helping to establish the important business of agriculture on a sounder basis. While serving farmers in these ways, land banks are, at the same time, providing for investors an outlet for their funds that is both safe and exempt from taxes. Like the highest type of real-estate bond houses operating in our cities, the land banks have proved to be useful institutions in shifting funds from savers to users.

QUESTIONS

1. Suppose building and loan associations develop to the point where they supply the need of every one desiring to own his own home, why would there still be need for the mortgage company?

2. In the example given on page 245 in which Jones borrows $5,000, might it not have been best for him to go to the Building and Loan Association for the money? What advantages would he have found by doing that? What disadvantages?

3. Suppose Smith has saved $5,000, and he prefers to lend the money on real-estate mortgage security. What are several different ways by which his money may be placed in the hands of Jones, the borrower?

4. If a mortgage company advances the funds to Jones and then sells the note and mortgage to Smith, what advantages does Smith obtain as compared with making the loan directly to Jones? What disadvantages?

5. Why do some mortgage companies issue and sell bonds, while others do not?

6. Mortgage Company *A* wants Smith to invest his $5,000 in Jones's note and mortgage. Mortgage Company *B* wants Smith to buy five one-thousand dollar real-estate mortgage bonds, each one of the five being a piece of a different loan made by Company *B*. If both propositions carry the same rate of interest, which should Smith choose and why?

7. Why is it important to have the title to the property examined before a loan is made?

8. Why does a second-mortgage loan cost the owner about twice as much in interest and commission charges as a first-mortgage loan costs him?

9. Make out a table, heading one column joint-stock land banks and another column, Federal land banks. In each column put the appropriate answer to the following questions: (*a*) Who organizes each? (*b*) Can it issue and sell bonds? (*c*) Are its bonds tax exempt? (*d*) How does each get in touch with the borrowing farmer?

10. Many of the joint-stock land banks have been organized by men who were formerly in the mortgage-company business. How do you account for this?

11. What advantages would farmer Brown gain by borrowing from a land bank instead of a mortgage company? Why cannot the mortgage company offer the same terms as the land bank?

12. Some critics have assailed the land bank system on the ground that its tax-exempt bonds permit the farmer to borrow money cheaper than city men and corporations can borrow. Defenders of the system make two replies:

1. The farmer has been the victim of unjustly high charges for loans in the past and no one should now begrudge him a favorable rate.
2. Agriculture is the foundation of our national life. To help it prosper, we are justified in giving it special aid in raising funds.

What is your opinion of these arguments?

TOPICS FOR FURTHER STUDY

1. The Mortgage Company:
   Moulton, *Financial Organization*, Revised Edition, pp. 646–652.
   Moulton, *Money and Banking*, Part II, pp. 379–401.
   Phillips, *Readings in Money and Banking*, pp. 596–601.

2. Services and Operations of the Land Banks:
   Magee, *Materials of Banking*, pp. 631–644.
   Moulton, *Financial Organization*, Revised Edition, pp. 652–670.

CHAPTER XVI

BOND HOUSES

A. The Work of Bond Houses
B. How Bond Houses Are Organized
C. Protecting Investors in Securities

We have seen how the needs of home builders for funds are provided by building and loan associations and by mortgage companies; how business structures in cities are financed by real-estate bond houses; and how farmers are provided with mortgage loans by mortgage companies and land banks. Certain needs of borrowers, however, cannot be met by these institutions. What these needs are and how they are met by bond houses form the topics for this chapter.

A. The Work of Bond Houses

(Relieve borrowers of task of finding investors; guarantee success of direct offering of securities; aid the management of business enterprises; assist investors in various ways)

Bond houses relieve borrowers of the task of finding investors. — We saw in Chapters IX and X how the policies of business firms called for the use of shares of stocks and of bonds. When these instruments are ready to be issued, another problem arises: How shall they be placed in the hands of the investor? For a corporation or a government to decide to issue bonds is one thing; actually to sell the bonds and collect the money is another thing. To do the latter, bond

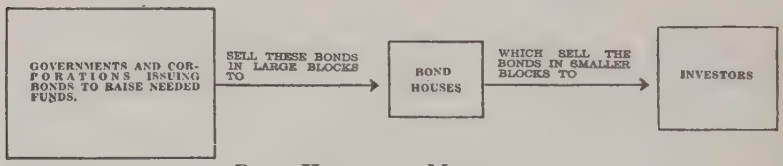
houses exist. They are specialists at the task of selling securities for governments and business concerns. How this aids the borrower may be seen from an illustration.

In 1924 the currency system of Germany was being reorganized, following the disastrous paper-money experience of that country (see page 52). Among other things needed to reëstablish Germany's money on the gold standard was that that country obtain, through borrowing, a large amount of gold. The German government, accordingly, authorized the sale of bonds amounting to $200,000,000. For the officials of the German government to have attempted to sell these bonds to investors all over the world would almost certainly have resulted in failure. These officials had no list of possible investors to whom they might appeal; they had no facilities for reaching the investing public in England and the United States; in short, they were not organized or equipped for the task of selling bonds. Accordingly, the German government sold the entire issue of bonds to a group of bond houses. One of this group was J. P. Morgan & Company, who arranged to purchase $110,000,000 worth of the bonds to be resold to investors in the United States. Thus the German government was relieved of the work of finding the ultimate buyers of its bonds, and received the cash for its bonds in a lump sum, on an appointed day.

Similarly, when the officials of a business corporation, such as the Southern Power Company, decide to issue bonds to provide funds for certain improvements, they find it desirable to sell the bonds to a bond house or to a group of bond houses acting together. The financial executives of the Power Company know that on a certain day the funds will be forthcoming in a lump sum, while the task of selling the bonds will be assumed by the bond houses. Thus the Power Company can give its attention to the electrical business while the bond

houses can give their attention to selling bonds. In this way specialists aid one another. The bond houses will doubtless make a profit out of the sale of the bonds; still it is cheaper for the Power Company to pay this amount to the bond houses than to attempt to sell the bonds itself.

This work of bond houses, in relieving borrowers of the task of finding investors for their securities, means that bond houses are financial middlemen. Their position as intermediaries between borrowers and lenders may be shown as follows:


GOVERNMENTS AND CORPORATIONS ISSUING BONDS TO RAISE NEEDED FUNDS.
SELL THESE BONDS IN LARGE BLOCKS TO
BOND HOUSES
WHICH SELL THE BONDS IN SMALLER BLOCKS TO
INVESTORS

Bond Houses as Middlemen

Bond houses guarantee the success of "direct" offerings of securities. — Let us assume that the Commonwealth Edison Company of Chicago plans to raise $5,000,000 for a new generating station and for extension of its lines. Since the company already has a heavy debt on account of previous bond issues, the directors decide to raise this $5,000,000 by selling shares of stock. They decide also to offer this stock directly to their customers, believing that "customer ownership" is a good policy; good because it brings local savings into their business, and good also because customers, receiving the profits of the business, are not so likely to clamor for lower rates on electricity as they would if the company were owned by a few capitalists.

Having decided to offer $5,000,000 of stock to the customers of the company, the next question is: What if the attempt should fail? The directors feel that the new plant and line extensions are imperatively needed; perhaps they have even

started work on these improvements and cannot stop. The money must be raised by a certain date. The customer ownership campaign may be a great success; it may be a partial success, selling perhaps $3,000,000 of the $5,000,000 of stock, and then again it may be a dismal failure. Is there any way by which the directors can insure themselves against the risk of partial or complete failure? The answer is that they may get a bond house to guarantee or insure the success of this "direct" offering of stock. For a stipulated commission or fee, a bond house would agree to take over and sell all the stock remaining unsold when the customer campaign ended. If the "direct" sale by the company to its customers were a complete success, the bond house would collect its fee but have no work to do. If the "direct" sale were a partial success, the bond house would sell the balance of the stock. If the attempt to sell to the customers were a failure, the bond house would have practically the entire $5,000,000 of stock to dispose of, but still it would collect only the stipulated fee. Many corporations are willing to pay a fee to obtain a guarantee of the success of a "direct" offering of securities.

Bond houses aid the management of some corporations. — Reputable bond houses will not handle the securities of any and every corporation. They realize that if the corporation fails, investors who have purchased the securities of the failed corporation will blame the bond houses which recommended and sold the securities. For this reason, a well-managed bond house makes a careful investigation of the affairs of a corporation before undertaking the sale of its securities. Accountants are set to work to make an examination of the accounts and records; engineers go over the plants, machinery, and other property; lawyers certify to the legality of the proposed bonds; analysis of the past, present, and

probable future profits of the corporation is made. The bond house insists that the corporation must have its house in order. If the bond house finds that the corporation's house is not in order, it may refuse outright to buy the bonds; or, it may agree to buy the bonds on condition that certain changes are made in the management of the corporation. Frequently the change insisted upon is that a representative of the bond house shall be placed on the board of directors of the corporation. This is done in order that the bond house may suggest needed improvements in the management of the corporation and see that everything possible is done to make the bonds safe. This helps explain why one or more investment bankers are found on the board of directors of so many of our railroads, public utilities, and manufacturing enterprises to-day.

Corporations do fail, however. Failure means that the corporation cannot pay its bills; in other words, it is insolvent. When a corporation is insolvent, those holding the securities of the corporation are in danger of losing part or all of their investment. The bond house, which sponsored and recommended the securities in good faith, sometimes feels that it has a moral responsibility to help reorganize the insolvent corporation and thereby reduce the loss falling on the security holders. This task of reorganization usually involves a change in management and the raising of additional funds to pay off accumulated bills and set the corporation on its feet. In these matters the bond house acts. It usually insists on representation in the management and helps to raise the needed funds by selling new securities to the investing public.

Bond houses aid investors in various ways. — Thus far we have been considering how the work of bond houses aids the government or business firm issuing the securities. We turn now to what they do for the savers or investors.

They select securities for investors. — There are more than 400,000 corporations in the United States, besides the many governmental organizations, such as states, counties, cities, and school districts. Many thousands of these corporations and governmental organizations are trying to obtain capital by offering their stocks, bonds, and notes to the public. It is the business of the bond houses to investigate these securities, to determine which are safe and which are not, and to select and recommend to investors those that are sound. The average investor has neither the time nor the ability to investigate for himself. He must depend on experts for this work. The executives of bond houses, or investment bankers as they are usually called, are such experts. Bond houses do not succeed in preventing all risky securities from getting to the public, but they head off many.

While bond houses tend to select the good securities from the bad, offering only the good ones to investors, there is another kind of selection needed. There should be a selection according to the needs of investors. A bond house should offer each particular investor the particular kind of stock or bond adapted to his needs. We saw in Chapters IX and X that various kinds of shares of stock and of bonds were created to carry out the policies of business executives. These various stocks and bonds differ in such matters as the risk attached to their ownership, the maturity date, and the income they yield. Similarly, investors have different needs. For Jones, a preferred stock may be a suitable investment, whereas for Mrs. Jones a first-mortgage bond may be best. For a person who can afford to take some risk, common stock may be appropriate, while another may be best served by tax-exempt farm-loan bonds. It should be a part of the work of a bond house to analyze each customer's individual needs and to recommend the particular kind of stock or bond

adapted to his needs. Unfortunately, many bond houses do not serve this need adequately. Most of them are so eager to make a sale that they recommend whatever they have on hand at the time, whether or not it fits the needs of the customer.

They sell on the instalment plan. — In recent years some bond houses have endeavored to popularize the sale of bonds on the instalment or partial payment plan to persons of small incomes. An illustration is provided by the experience of a certain youth who was employed as a delivery boy by a department store in a western city. One day, while glancing through the advertising pages of a prominent monthly magazine, the boy's eye caught the following:

COMFORTABLY FIXED AT FIFTY

What $10 a month will do for a boy

At one side of the advertisement was the picture of a boy with a $10 bill in his hand; at the opposite side, the picture of a prosperous looking man of middle age, sitting in his library. Between the pictures, a simple statement told how a boy of fifteen, applying $10 each month toward the purchase of good bonds and reinvesting the interest, would have over $18,000 worth of bonds when he reached the age of fifty. A free booklet describing the plan was offered to any one who would write to the bond house. The name and address of the house was given at the bottom of the advertisement.

The youth, believing that he could easily save $10 a month out of his wages, wrote for the booklet. At his father's suggestion he inquired of a banker regarding the reputation of the particular bond house with which he was proposing to deal. The banker reported that it was a safe and reliable house. The booklet told him exactly how to proceed, and

within a week he had in his possession a card containing a contract. By the terms of this contract he agreed to send $10 each month to the bond house until he had paid for a certain $100 bond which he had selected. The bond house agreed to allow him 5 per cent interest on his payments and to mail the bond to him as soon as it was paid for. He planned to start payments on a second bond as soon as he finished paying for the first, applying the interest received on the first bond toward payments on the second. In the course of time, as his income increased, he expected to subscribe for a $500 bond, paying $50 per month, thereby accumulating bonds at a much faster rate. The lad was thus introduced to a bond-buying plan adapted to his needs.

Through the partial-payment plan, bond houses have brought good investments within the reach of the small investor, thereby helping the investor and at the same time helping the bond houses by increasing the sale of bonds.

They may exchange and resell securities. — Suppose the files of a bond house show that a certain customer has a bond which will mature and be paid off in a few weeks. A salesman from the bond house calls on him and offers him another bond in exchange for the one about due. By so doing the bond house makes a sale and the customer is not only spared the trouble of cashing his bond, but he does not lose any interest while seeking a reinvestment of his funds.

Or, suppose the files show that another customer owns some tax-exempt municipal bonds. The files also show that he is a man whose income does not place him in the class where heavy taxes must be paid on his income. It would be better financially for him to switch from a 4 per cent tax-exempt municipal bond to a 6 per cent public-utility bond. He could pay the small income tax he would be liable for and have considerably more interest left, if he were to switch over. The

bond house is ready to point out such facts to him and to arrange for the exchange.

It sometimes happens that a person buys a bond for investment, that is, with the idea of holding it until maturity, but finds later that he must sell the bond in order to obtain needed funds. If the bond is one that is listed and dealt in on a stock exchange, any broker will sell it for him (see Chapter XXI). If it cannot be sold on a stock exchange, he might have considerable difficulty in disposing of it. The larger bond houses usually arrange to accommodate their customers by repurchasing, at the prevailing market price, securities previously sold to them. These securities are then resold to other customers.

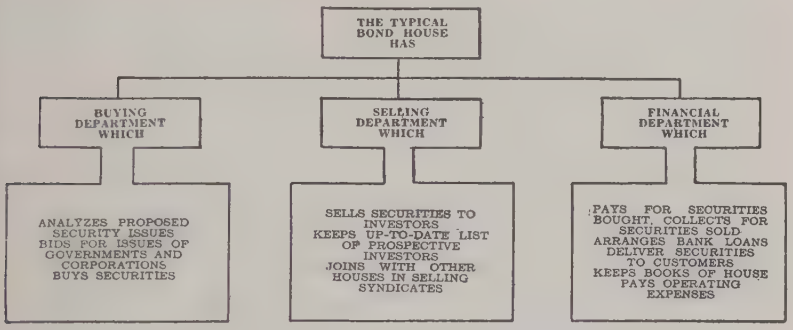
In addition to the services mentioned above, some bond houses aid their customers in other ways. One way is by maintaining a safe-keeping department where the customer may leave his securities, thus saving him the expense and trouble of caring for his bonds. Another service is the collection of interest and principal due on bonds, under which a check is sent to the customer for the amount as soon as the collection is made. Some houses maintain a careful record of the securities sold to each customer in order that they may keep the customer posted on any important information affecting his holdings. When bonds are called for redemption by a corporation (see page 182), or are desired for sinking-fund purposes (see page 179), the bond house tries to notify the customer of the fact.

B. How Bond Houses Are Organized

(The buying, the selling, and the financial departments; wholesale and retail houses; independent firms, departments of banks, and subsidiaries of business firms)

In carrying out the work of a bond house it is necessary to obtain a supply of securities for sale, then to sell the securities

to investors, and finally to collect and disburse the funds. This means that in the typical bond house there are three departments: the *buying* department, the *selling* department, and the *financial* department. The chief tasks of each department may be outlined as follows:


THE TYPICAL BOND HOUSE HAS
BUYING DEPARTMENT WHICH
ANALYZES PROPOSED SECURITY ISSUES
BIDS FOR ISSUES OF GOVERNMENTS AND CORPORATIONS
BUYS SECURITIES
SELLING DEPARTMENT WHICH
SELLS SECURITIES TO INVESTORS
KEEPS UP-TO-DATE LIST OF PROSPECTIVE INVESTORS
JOINS WITH OTHER HOUSES IN SELLING SYNDICATES
FINANCIAL DEPARTMENT WHICH
PAYS FOR SECURITIES BOUGHT, COLLECTS FOR SECURITIES SOLD
ARRANGES BANK LOANS
DELIVER SECURITIES TO CUSTOMERS
KEEPS BOOKS OF HOUSE
PAYS OPERATING EXPENSES

How Bond Houses Are Organized

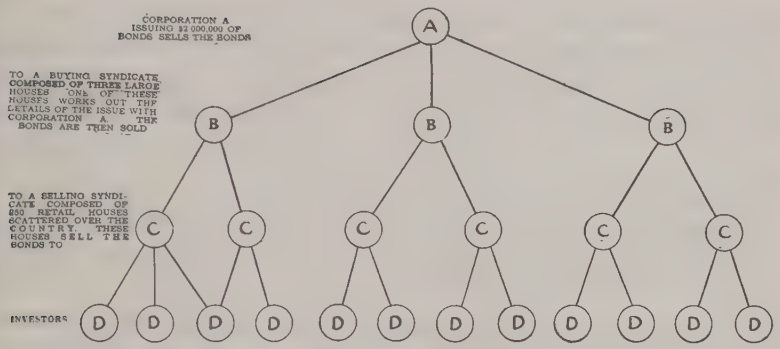
The buying department selects the securities. — The smaller bond houses usually buy their securities from the larger bond houses, since they are not equipped to deal with large corporations and governments issuing bonds. This means that the larger bond houses assume the task of buying the securities from the issuing corporation or government. How does the buying department of a bond house know which corporations are planning an issue of securities? Does the investment banker go to the corporation, or does the corporation come to the investment banker? The procedure differs in different cases. Sometimes, when it becomes known that a certain government or business corporation is about to issue securities, various bond houses may bid keenly against one another to obtain the issue. In other cases perhaps a certain bond house has always handled the securities of a particular corporation and it is taken for granted that this bond house

will obtain the business from that particular corporation without competition. In other cases certain investment houses have developed such a reputation for successful handling of securities that they are continually being offered more issues than they can take care of.

Before purchasing an issue of securities the buying department must be satisfied that the bonds will prove a safe investment for the public, that the bonds may legally be issued, and that they may be purchased at an attractive price. The purchase price depends, not on the wishes of the corporation or of the bond house, but on market conditions chiefly. The demand for funds compared with the supply determines the price. In analyzing market conditions, however, the investment banker is a specialist. Accordingly, he is in a position to advise the financial executives of the corporation issuing the bonds regarding the details. While doing so he keeps in mind the fact that he must please the investing public as well as corporation officials.

The buying department sometimes has one other problem. If the issue of securities is so large that one house either cannot handle it alone or does not feel like risking so much of its resources in one purchase, the bond house in question invites other houses to join with it in the purchase of these securities. Such an arrangement is known as a *buying syndicate*. A group of houses, or syndicate, unites to purchase the securities.

The selling department disposes of the securities. — If the issue purchased by the buying department is a small one, the house will undertake to sell the entire amount to its own customers. If the issue is a large one, the house will invite other houses to join with it in selling the securities. This means that a selling syndicate is formed. The operation of both a buying syndicate and a selling syndicate may be shown as follows :



How a Buying and a Selling Syndicate Work

Finding the investor is the task of the selling department. — Bond dealers dispose of their securities by mail and through salesmen. Their customers are found among the following:

1. Savings banks, having idle funds resulting from savings deposits.

2. Institutions with endowment funds to invest, such as colleges, universities, hospitals, and charitable organizations.

3. Insurance companies, seeking profitable employment for the premiums paid in by policy holders.

4. Trust companies, having funds placed in trust with them.

5. Individual trustees and guardians, who are managing the funds belonging to others.

6. Commercial banks, having idle funds on hand for which they seek a profitable outlet.

7. Individual investors.

8. Lodges and fraternal orders, having funds in their treasuries.

9. Corporations, with pension or other reserve funds to invest, or with more cash on hand temporarily than they need.

A well-organize' selling department knows where a particular security will sell. If it is a tax-exempt bond, it will appeal to individuals who have heavy income taxes to pay and who are therefore on the lookout for securities, the interest on which is nontaxable. If it is a speculative bond or preferred stock, certain clients only will be interested. Some customers want a security that is listed on the New York Stock Exchange, because they want to know its market price every day. Other customers may have a decided preference for public-utility bonds. Trustees of estates and savings banks are restricted by law to certain kinds of bonds. For these reasons, only a portion of the list of customers kept in the office of the bond house will be interested in any one offering.

$86,042,000 New Securities To Be Placed on Market Today

New offerings of securities totaling $86,042,000 will be placed on the market today by New York banking houses and syndicates. Of this amount $26,292,000 will consist of bonds and the remainder of stock, including both common and preferred

The new bond issues are classified as follows:

Industrial $25,000,000
Municipal 1,292,000

MUNICIPAL LOANS

One Day's Offerings of New Securities

The financial department handles the funds. — One duty of the financial department is to receive and pay for all securities purchased by the buying department. The time of payment is stated in the purchase contract. If the securities can be sold before payment to the corporation is required, the financial department will not have any trouble in raising the money; it will be supplied by the customers purchasing the securities. On the other hand, if the issue sells slowly, the

financial department may have to borrow money from a commercial bank to make the payment to the corporation.

The financial department collects for all securities sold. It keeps account of the payments made by customers who are buying on the instalment plan. Other duties are to deliver the securities when paid for, to keep the general books of the investment house, to determine the profit or loss for the year, to make up the tax reports, and to pay the taxes, salaries, rent, and other expenses.

Many bond houses have other departments, such as the correspondence department (to handle the mail), the safe-keeping department (to care for securities left with the house), and the trading department (to help customers market their securities). But most of the work falls on the three departments described.

Bond houses differ in the scope of their activities. — We have been considering the internal organization of a bond house, the work of the chief departments within the house. Bond houses may also be viewed from the standpoint of the scope of their activities. Here we find three types of houses: those doing a wholesale business only, those doing both a wholesale and a retail business, and those doing a retail business only.

Wholesale houses. — Houses doing only a wholesale business investigate and purchase securities from governments, corporations, or business firms issuing them, and sell these securities to the bond houses doing a retail business. These houses handle only very large issues, chiefly foreign government and railroad bonds. They have never seen fit to establish retail departments to sell to the investing public, probably because they are convinced that more profits are to be made by concentrating their energies on handling securities on the wholesale plan. A prominent example of

this type of bond house is J. P. Morgan & Company, of New York City.

Wholesale and retail houses. — The majority of large bond houses in the United States do both a wholesale business (buying from governments and business corporations) and a retail business (selling to investors). These houses are doubtless convinced that a combination of wholesaling and retailing pays better than confining efforts to one field alone. Houses of this type generally have an office in each of the leading cities of the country.

Retail houses. — Thousands of small bond firms, scattered over the country, buy their securities from the wholesale houses and sell to the public. In houses of this type the buying is a relatively simple matter, since they buy the offerings of the larger bond houses and do not attempt to deal with issuing corporations.

In ownership there are three types of houses. — Considered from the point of view of ownership we have three types of houses: independent firms, departments of banks, and subsidiaries of business corporations.

Independent firms. — The majority of bond houses are independent firms, having no connection with other business enterprises. Some of these independent houses are organized in the corporate form, but many of them use the partnership form. There are two main reasons for this. In the first place, many of the burdensome taxes imposed on corporations may thus be avoided, as well as the filing of financial reports required of corporations by our various states. In the second place, a partnership can readily raise the amount of capital required to handle this business. No large building, with expensive and elaborate fittings, need be provided, since few customers ever come to the investment house itself. In fact, a suite of rented offices in the financial district will provide

adequate headquarters. Then, too, only a moderate capital is needed to carry on the business itself, since securities are sold about as fast as they are purchased, thereby providing the cash needed for operation. Independent firms vary in size and scope of activity from the small retail house to the largest houses doing a wholesale and retail business.

Departments of banks and trust companies. — We have already observed that there is a tendency toward department-store banking, a bringing together of many financial services under one roof (see page 213). One evidence of this tendency is seen in the fact that many of our banks and trust companies have organized a bond department, whose chief work consists of buying bonds at wholesale and selling them at retail to customers of the bank. In addition to this profitable activity, a bond department may perform other valuable service for the bank. One such service is to advise the bank on its purchases and sales of securities. At times a commercial bank has funds to invest in bonds. If such a bank has a bond department, it may obtain expert advice concerning what bonds to purchase. At other times certain securities on hand must be sold in order that funds may be obtained to take care of customers' demands. In this case, again, the advice of the bond department is sought as to which of the securities on hand should be disposed of. Another service rendered by the bond department is to obtain securities for the bank at a lower price than the bank would otherwise pay, since the bond department buys bonds at wholesale prices. Still another service is to advise the bank concerning the value of stocks and bonds offered by customers as security for loans.

Subsidiaries of business corporations. — A third type of bond house is a subsidiary corporation belonging to a business concern. Several of our largest public-utility companies own and operate such subsidiaries. These large public-

utility companies, in order to supply the increasing demand for electricity, are almost continually building new electric power plants and transmission lines. To finance these, new securities are being offered from time to time. The corporation may be convinced that it saves money by having its own subsidiary sell the securities rather than paying commissions to independent bond houses. When there are no securities to be sold for the parent company, the subsidiary may keep its employees busy by buying securities from wholesale houses and selling them at retail, as other bond houses do.

C. Protecting Investors in Securities

(Need for protection; methods of protection; blue-sky laws)

If all stock and bond dealers were competent and trustworthy, investors would have little difficulty in placing their savings in sound securities. Unfortunately, some dealers are dishonest. This creates a hazard both for the investor and for the honest dealer. How to protect investors and honest dealers against the activities of dishonest dealers is one of the most difficult questions connected with investment banking.

Why investors need protection. — A rather typical incident illustrates the need for protection to investors. A school teacher in a southwestern city had saved $800, which was drawing 4 per cent interest in a savings account in a local bank. Like most teachers, she desired to travel, to have more books, and to be financially independent when age forced her to retire. As the years passed by, she came to feel that her ambitions could not be realized unless she had a stroke of fortune. She had read and heard a good many stories of riches made by investing in oil lands in Texas and Oklahoma. Accordingly, when a smooth and persuasive salesman talked so

convincingly to her about the rich oil lands his company had, that drilling was about to begin, how certain the company was to pay 100 per cent, perhaps 500 per cent, dividends

WAR ON THE "WHITE-COLLAR BANDITS"

A NEW CITY OF PITTSBURGH, with an assessed valuation of approximately a billion dollars, could be built each year with the money handed over annually by the American "investing" public to stock-swindlers and bucket-shop men. For that is the amount—$1,000,000,000—which these "go-getters" and "dynamiters" extract from the public, says Frank J. Williams, in a New York *Evening Post* series of articles. M. B. Levick, in another and earlier series for Current News Features, reminds us that we are the most gullible people in the world. "The American public," he maintains, "will try to scratch a window-pane with a diamond; it will try out an automobile. But one person out of every ten who buys securities hands over his—or her—money merely because some super-salesman of worthless stocks asks for it." According to this writer, our losses from stock frauds is four times America's loss from burglary, larceny, and petty theft. It is ten times the forgery total. It is four times the loss caused by trade frauds, as estimated by the officials of the National Association of Credit Men. At this rate, the money gathered in by stock-swindlers—"White-Collar Bandits"—would in twenty years be sufficient to pay off the national debt.

The people of New York State alone, says Mr. Williams in one of his articles, lost $500,000,000 in the operations of crooked promoters, bogus brokers, and fake security salesmen last year.

Courtesy of the "Literary Digest"

yearly, and that but a few shares were left, she thought her golden opportunity had come. Without consulting any one, she exchanged her savings of many years for 800 shares of stock in the Forgotten Lands Petroleum Company. For

many years thereafter she wished she could have forgotten that transaction, or that she had been " forgotten " by the salesman when he was looking for a gullible purchaser of his stock.

The school teacher's experience is the experience of thousands of Americans each year. In many cases the victim is not a school teacher nor is the enterprise an oil company. The victims come from all classes in society, while the schemes are as varied as are the ingenious minds of clever men. But the result is the same. The American people sink hundreds of millions of dollars a year in worthless and fraudulent schemes.

This loss of savings has both a personal and a social significance. It is a serious matter to the *persons* losing the money, because so frequently the loss falls on persons who can least afford it. The " get-rich-quick " schemes appeal strongly to those who have sacrificed much in order to save a little. Such persons are often eager to strike it rich, so that they won't have to " pinch " so hard in the future. Since these persons often possess little knowledge of financial matters, they are rather easy prey to unscrupulous salesmen.

This loss is also a serious matter to *society*, because it deprives legitimate industry of these savings. There are many well-managed enterprises, including home construction, whose development calls for increasing amounts of savings. Such enterprises cannot promise fabulous returns yearly, but they can and will give a *safe* investment and a fair return. It would greatly promote the development of sound enterprises if the funds lost to " fake " schemes were available for industry.

Protection may be through education and through legislation. — Two weapons are being used against fraudulent investment schemes: education and legislation. Education proceeds slowly but is the surest protection to the in-

EAR-MARKS OF A FRAUDULENT SCHEME

1. The argument that other companies engaged in this business have made fabulous profits
2. This concern has a name similar to that of a well-known, successful corporation
3. Only a little stock left — act quickly
4. Pictures of the officers of the company — aggressive, successful-looking types
5. Pictures of the company's property, an oil well, a factory building, or a supposed mine
6. Recommendations by unknown men with high-sounding business titles
7. The stock is being offered to only a few carefully selected leaders in the community
8. The price of the stock will be advanced within a short time — buy at once
9. How can you ever face your children and grandchildren if you fail to share in this wonderful opportunity knocking at your door?

vestor because it tr ins him to avoid bad investments and to make good ones. He becomes able to judge the good from the bad. Even though an investor knows little or nothing about stocks and bonds, education may lead him to be cautious regarding the dealer who seeks to sell him securities. Some dealers have been in business for years and have established a reputation for handling only sound investments. These dealers usually advertise in the best financial magazines, belong to the Investment Bankers' Association of America, and are favorably known in the banking world. By inquiring of his own local banker or by writing to a prominent newspaper or magazine published in the city in which the dealer is located, an investor can usually learn whether or not a dealer is trustworthy.

Legislation is also attempting to protect investors. Our federal government has a law which prohibits the use of the mails to defraud a person. In the enforcement of this law the Post-Office Department suppresses each year many fraudulent schemes. Our various state governments have gone even farther, most of them having passed laws to control dealers in securities and to regulate the sale of securities within the state. These laws have become known as "blue-sky" laws, because they aim to prevent the sale of securities which represent nothing more than blue sky.

What "blue-sky laws" do. — While the details of "blue-sky" laws differ from state to state, the main features are the same. They undertake to regulate the sale of securities within the state in such a way that fraudulent securities cannot be offered at all, and that uncertain, speculative securities will be so labeled that the investor will be put on his guard. A certain state official or commission is designated to pass on proposed offerings of securities, and penalties are provided for violations of the act.

How much good is accomplished by these laws it is impossible to say. In some states enforcement is weak, permitting old evils to flourish as in former days. In states where a serious effort is made to enforce the law, worthless securities are still sold. Through advertising and through salesmen who move about so quickly that the hand of the law is never laid upon them, the bad work continues. Some persons contend that "blue-sky" laws attack the whole problem at the wrong time, in that they seek to prevent the *sale* of worthless securities rather than the *issue* of such securities. These persons insist that the time to clamp down the lid is when corporations are chartered.

On the whole, "blue-sky" laws do some good, probably much more good than harm. Nevertheless laws are a poor substitute for education. So long as ignorant people believe that they can give strangers their money and get from them 10 to 1,000 per cent returns on it, so long will fraudulent schemes flourish. The "get-rich-quick" impulse cannot be legislated out of humanity. Sound financial education is the most certain way to reduce this great waste of social savings.

Summary. — Bond houses, as financial middlemen, stand between the issuers of securities and the investing public. When governments and corporations issue securities, bond houses stand ready to purchase the entire issue in a block, thereby relieving the issuer of the task of marketing the securities. When an issue is offered directly to the public by a corporation, bond houses may guarantee the success of the offering, taking over all securities remaining unsold when the campaign ends. The investment bankers in charge of bond houses also aid the issuing government or business corporation by helping it to plan the proper type of security to offer, and by making the business management of the issuing concern more efficient and therefore more capable of earning profits.

Bond houses aid investors by selecting and offering to them the sounder types of securities; by providing a market for securities previously sold to investors; by selling to them on the instalment plan; and by offering them counsel in investment matters.

Some of the largest houses buy securities in large blocks and sell only to other houses, thereby confining their work entirely to the wholesale field. Other houses buy in large blocks from issuing firms and sell both to other bond houses and to the public, thereby doing both a wholesale and retail business. Many small houses buy only from the larger bond houses and sell to the public, thereby doing a retail business only. Some houses are organized as independent firms, some as departments of banks and trust companies, and some as subsidiaries of large corporations having many securities of their own to sell.

In recent years the volume of savings seeking investment in securities has greatly increased. This has encouraged dishonest promoters and security dealers to offer fraudulent and unsound securities to the public. Many persons fall victims to these "get-rich-quick" schemes. Society is seeking to reduce this loss through "blue-sky" laws aimed to suppress the sale of bad securities, and through education aimed to teach people to deal only with honest and reputable dealers.

QUESTIONS

1. Fill out the blanks in the table at the top of page 287 with the appropriate answers:

2. If a state is issuing $20,000,000 of bonds to build good roads, why is it cheaper to pay a group of bond houses a portion of this amount to sell the bonds rather than for the state to sell the bonds itself?

3. "Bond houses are middlemen passing securities along the line in one direction and money back up the line in the opposite direction." Explain. Who stands at each end of this line?

	Savings banks	*Building and loan associations*	*Mortgage companies*	*Bond houses*
From what classes of people do most of their funds come?				
Into what lines of enterprise do most of these funds go?				
What distinctive advantages are offered to customers by each institution?				

4. Do bond houses simply pass securities along the line, or do they have something to do with originating the securities? Why should they help plan the security issues?

5. If you were head of the buying department of a bond house, and the president of a large mail-order house came to you offering a $5,000,000 issue of its 6 per cent first-mortgage bonds, make a list of the things you would want to know before giving him your decision.

6. If you decided to purchase the bonds mentioned in the foregoing question, show how your decision would affect the growth of the mail-order business and possibly of other businesses. Show how it would affect investors.

7. Illustrate by the foregoing case the operation of both a buying and a selling syndicate.

8. Show how a student in a small town who is able to save $10 per month could become a regular customer of an investment banking house? What educational literature might he expect to receive free? What other advantages would he gain? Why would it be a good thing for him to connect with a large house rather than a small one?

9. Write to a bond house asking for a circular describing a recent issue of bonds. Analyze it to determine what are regarded as the strong points of a bond issue. (See the financial pages of the newspaper or of a magazine for names and addresses of bond houses.)

10. Among the different ways by which an investor can tell whether a particular investment house is sound or unsound are the following:

(*a*) Does it frequently become a member of large selling syndicates?

(*b*) Has it been in business for several years?

(*c*) Can it meet the requirements of membership in the Investment Bankers' Association of America?

(*d*) Are its advertisements carried on the financial pages of the best papers?

(*e*) Does your local banker report that it is a good house?

Why is each of these a good test?

11. Why is it not possible to prevent the formation of all "fake" enterprises?

12. There are certain concerns which sell "sucker" lists (lists of names of persons who are "easy marks" or "suckers"). Why are such lists compiled and offered for sale? How do you suppose the names on these lists are obtained? Who buys these lists?

13. What arguments might be advanced for and against the proposition that bond dealers should be examined and licensed by the state, as lawyers are?

14. The "blue-sky" law of one mid-western state divides all corporations into four classes: *A* and *B* are corporations which can be trusted to sell their securities without defrauding anybody, such corporations as counties and cities, banks, public-utility companies, and companies whose stocks and bonds have been bought and sold on the New York and other stock exchanges for many years. Class *C* covers corporations other than *A* and *B* which have been earning net profits for at least two years. Class *D* includes all other corporations. Do you see any good reason for such a classification? Are Class *C* securities more risky than Classes *A* and *B*? Are they likely to be less risky than Class *D*? What does the ability to earn net profits for two years prove regarding a corporation?

15. Following are some of the requirements which must be met before Class *D* securities may be sold:

(*a*) State name of company, where and when incorporated.

(*b*) Tell amount of stock authorized and amount proposed to be sold.

(*c*) Amount of stock given to promoters and others for services rendered, and for patents, contracts, good will, and other intangible assets.

(*d*) Tell whether brokers are to sell the stock and if so what commission they are to receive.

(*e*) Give personal history of each incorporator and director.

(*f*) Print conspicuously on all circulars and stock subscription blanks "These are speculative securities."

Give reasons for each of the above requirements.

16. Why is legislation a less satisfactory remedy than education for the "get-rich-quick" disease?

TOPICS FOR FURTHER STUDY

1. Selling Securities through Bond Houses:

   Dewing, *Financial Policy of Corporations*, Revised Edition, Book II, chaps. VIII, IX.

   Moulton, *Financial Organization*, Revised Edition, chap. XIII.

   Lincoln, *Applied Business Finance*, chap. X.

   Lough, *Business Finance*, chaps. XIV, XV.

   Willis and Edwards, *Banking and Business*, chap. XIX.

2. The "Get-Rich-Quick" Scheme and "Blue-Sky" Laws:

   Mead, *Corporation Finance*, chaps. X and XI.

   Dewing, *Financial Policy of Corporations*, Revised Edition, Book II, chap. X.

   Guenther, *Investment and Speculation*, chaps. XXVII, XXVIII.

   Jones, *Investments*, chap. XIX.

   Moulton, *Financial Organization*, Revised Edition, chap. XII.

CHAPTER XVII

TRUST COMPANIES

A. Why We Have Trustees
B. Why We Have Trust Companies

Among the financial institutions engaged in the task of moving the funds of savers into the hands of users, trust companies have risen into prominence. These companies are called "trust" companies because property is entrusted to them for care and management. They become, therefore, trustees of the property. They should not be confused with monopolistic industries, such as the former Standard Oil trust. Such monopolies are condemned by the public and are prohibited by the federal Anti-trust laws, whereas the trust companies here dealt with are financial institutions operating under the law and are approved by public opinion.

A. Why We Have Trustees

(Custody and management of property for individuals and for corporations)

A trustee may manage the affairs of an individual. — To understand some of the ways in which trustees aid individuals in modern society we may take a concrete case. Mr. T——— of Detroit, Michigan, has attained the age of 64, has been successful in business, and wants to retire. He and his wife wish to spend a year in Europe. Beyond that their plans are indefinite. They have accumulated property, free of debt, amounting to about $400,000. This property is partly in

Detroit real estate, partly in stocks and bonds of various corporations, partly in household effects, and partly in life-insurance policies. They have three children, all of whom have graduated from college and are in self-supporting positions of their own. Before Mr. and Mrs. T——— leave, they desire to set in final order all their business affairs. Conferences with officials of the Security Loan and Trust Company are held. An agreement is finally drawn up and signed embodying the following:

(1) All the property of Mr. and Mrs. T——— is turned over to the trust company to hold and manage in trust for them. As trustee and agent, the trust company has power to do anything to this property which it believes to be to the best interests of the estate. The experts of the trust company will make a careful inventory of the property, and it is expected that gradually the least profitable real estate and the least desirable securities will be sold, and what household effects are not given to the children will be disposed of. The proceeds derived from the sale of these properties will be invested by the trustee in promising real estate and securities.

(2) The trust company agrees to turn over to Mr. and Mrs. T——— whatever cash they need, limited only by the amount of the income collected from the property in trust, less the commission to the trust company for managing the property. It is the intention of Mr. and Mrs. T———, however, to spend less than the entire annual income from the estate, adding the savings to the estate.

(3) A will is drawn up, in which the Security Loan and Trust Company is named as executor. This document provides that the estate remain intact so long as either Mr. T——— or his wife survive. After the death of both, the estate is to be broken up and divided as follows:

(*a*) $25,000 to be given to each of six charitable and educational institutions, in which Mr. T——— and his wife are interested.

(*b*) $50,000 to be set aside and placed in trust for the grandchildren. Income from this trust fund may be used to assist in their education or be added to the principal until the grandchildren reach a certain age, at which time it is to be distributed among them.

(*c*) Balance remaining in the estate to be divided equally among the children.

(4) The life-insurance policies of Mr. T——— are to be made payable to his estate, so that a large amount of ready cash shall be available at his death to pay such expenses as those for sickness and burial, inheritance taxes, and court fees for recording and probating the will. Any balance remaining from the insurance is to be added to the estate.

While Mr. and Mrs. T——— were in Europe the trust company, acting as trustee, sold some of the real estate, and acted as landlord for that which remained, collecting rent, paying taxes, and making alterations to the property. The trust company also sold certain securities which it regarded as weak, and purchased others which were safer. It collected interest on the bonds and dividends on the stocks owned. It prepared income-tax reports, paid insurance premiums, and in general managed the affairs of the estate as well as Mr. T——— himself could have done. According to the trust agreement, all profits and losses went to the trust estate, while the trust company received, for its services as trustee, 5 per cent of the income collected for the estate. Mr. T———, enjoying his leisure, probably felt that he would rather pay this fee than to resume the active management of his affairs.

The essential elements of a trust. — The case of Mr. T——— is not exceptional. It is a modern instance illustrat-

ing some of the everyday duties of a trustee. These trusteeships, in fact, are not a modern invention, but run far back in the history of human affairs. Long ago men began to trust other men with the management of their property. During illness or prolonged absence from home, for example, a person had to entrust his business affairs to another. And after death it was necessary for every man having property to entrust the management and distribution of it to other men. The careful performance of these trusts was so important, not only to the owner of the property, but also to society at large, that gradually the law set up certain rules that should govern this fiduciary or entrusting relationship. These rules required the one to whom the property was entrusted (called the trustee) to exercise extraordinary care in handling the property, and compelled the trustee to account for everything to the real owner of the property. This real owner of the property is popularly called the trustor.

Still a third party is frequently involved in a trusteeship, namely a *beneficiary*, or one other than the owner, for whose benefit the trust is administered. When Mr. T———, by means of a formal agreement, places his property in the hands of a trustee to be administered, and finally distributed among his heirs, we see all the elements of a trust — a *trustor*, a *trustee*, the *beneficiaries*, a *trust estate*, and a *trust agreement*.

The trust agreement is the contract between the trustor and the trustee; it defines the powers of the trustee over the estate, how long the trust shall last, the compensation of the trustee, and various other details.

Services rendered to individuals by trustees. — The trusteeship of Mr. T——— illustrates some but not all of the services commonly rendered to individuals by trustees. The most important services rendered to-day by trustees are:

(*a*) *Administering property for living trustors.* — When a trustor is alive and is competent to manage his own property but prefers to have a trustee administer part or all of it, he is said to create a "living trust." The term implies that the trustor is living. The case of Mr. T——— illustrates a living trust.

(*b*) *Administering property for incompetent persons.* — The law regards as incompetent to manage their own affairs such persons as habitual drunkards, those of unsound mind, and those under legal age (in most states those under 21). Such persons must have their property managed for them. A trustee is appointed by the proper court of law to look after the property of such incompetents. Relatives of an incompetent person sometimes place property in trust with a trustee to be administered for the benefit of the incompetent.

(*c*) *Acting as executors or administrators of estates.* — When a person makes a will, as did Mr. T———, naming a certain party to carry out or execute the terms of the will, such a party is known as an *executor*. When no will is made, the court (usually the probate court of the county) appoints some party to administer and settle up the affairs of the estate. Such a party is known as an *administrator*. Trustees are serving to-day in both capacities.

(*d*) *Administering the property of insolvents.* — When a person is unable to pay his debts, he is said to be insolvent. In that event the proper court appoints a party to act as trustee and receiver. This party takes charge of the business affairs of the insolvent person, collects sums due the insolvent, and after paying the expenses of the trusteeship, distributes the funds among the creditors.

Corporations also need trustees. — Not only do individuals need trustees but corporations do also. This is clearly seen in the case of nonbusiness corporations, such as churches,

lodges, and colleges. These corporations usually own property, which must be managed by some one. It would be inconvenient, indeed, in many cases impossible, for all the members of such a corporation to act together in the management of their property. Accordingly, the management is usually vested in a board of trustees, who manage the property for the benefit of the members.

In the case of business corporations, trustees are also needed. These corporations, in the course of their financial operations, frequently find it necessary to place certain property in trust. We saw, for example, how an issue of corporation bonds necessitates a trustee to hold the mortgage, or the collateral (see pages 169 and 176). In connection with the issue and transfer of stock certificates, the payment of interest and principal on bond issues, and the reorganization of financial affairs from time to time, corporations find that their dealings with the public call for a trustee, a party who is trustworthy, reliable, and impartial. As corporations have grown, both in numbers and size, the need for trustees has expanded correspondingly.

Work performed for corporations. — As we shall see later in the chapter, there are certain advantages to trustors in having a trustee with uninterrupted existence. Accordingly, we generally find trust companies (incorporated trustees) acting as trustees for corporations. Trust companies have come to perform a number of important duties for our business corporations, some of which are not, strictly speaking, trusteeships; but they are usually closely associated with trusteeships, and may be discussed conveniently in this connection. Trust companies perform the following services for corporations:

(*a*) *Trustee under mortgage.* — As pointed out earlier (page 169), when a corporation mortgages its property to secure a bond issue, it cannot place the mortgage in the hands

of the bondholders, for they are a scattered group. It is therefore necessary to place the mortgage in the hands of a responsible third party, who will act as trustee. For this duty a trust company is commonly appointed.

Before a trust company will consent to act as trustee in such cases, it makes an examination of the title to the property and the form of the mortgage to see that the legality of the mortgage is beyond question. Then it accepts the trust — which means that it agrees to hold the legal title to the property in trust for the bondholders, releasing the title to the property back to the corporation after the bonds have been retired. It records the mortgage with the proper public official, examines the wording of the bonds to see that it conforms to the terms of the mortgage agreement, and finally makes sure that no more bonds are issued and sold than are authorized in the agreement. Thus the bond buyers, who are lending their funds to the corporation, are safeguarded by having the mortgage held in trust by a responsible trustee. One should not infer, however, that because a trust company agrees to act as trustee of a mortgage, the bonds issued are necessarily good. The trustee does not guarantee nor even recommend the bonds. All the trustee does is to see that the title to the property is clear and that the mortgage is properly made out. Purchasers of the bonds should understand that the earning power of the corporation and the value of the property covered by the mortgage are the *real* security for bonds. The trustee holding the mortgage has nothing to do with the earning power of the corporation or the value of the property mortgaged.

After the mortgage has been placed in trust and the bonds have been issued and sold, the trustee seldom has anything to do. Occasionally, however, a corporation fails to live up to its promises; then the trustee may have to act, for the

agreement usually provides that the bondholders must proceed through the trustee in enforcing their rights.

(*b*) *Registrar.* — Suppose the charter of a corporation authorizes the issue of 5,000 shares of stock. The public interested in this corporation believes that when certificates for 5,000 shares have been issued the corporation will stop issuing shares. If Brown buys 500 shares, he thinks of himself as owning one tenth of the corporation; and he does own one tenth of it, provided only 5,000 shares are issued. But how is any one to know how many shares are being issued? If the officers of the corporation are dishonest, what is to prevent them from issuing 6,000 shares when only 5,000 are authorized? Obviously some disinterested third party should check up on the issue of certificates, preventing further issues when the authorized limit has been reached. Such a party, appointed by the corporation, is known as a registrar. He keeps a register showing the number of shares outstanding. He refuses to register more shares than are authorized. His signature on a stock certificate is proof that the shares are within the authorized limit. He therefore protects the public against an over-issue of shares.

Practically all of our large corporations, and many of our small ones as well, have appointed a registrar. Since this duty calls for a party who is trustworthy, responsible, and permanent, it is customary to select a trust company to act as registrar.

(*c*) *Transfer agent.* — Suppose Brown, the owner of 500 shares of stock in Corporation *X*, sells these shares to Green. Brown endorses his stock certificate and hands it to Green. If Green does not have the ownership transferred on the corporation's records, the corporation will still regard Brown as the owner of these shares, and will send the dividend checks and mail all notices of meetings to Brown. It is, therefore,

important that Green have the shares transferred promptly to his name. Many corporations have their secretary take care of these transfers. Others appoint a separate transfer agent, one conveniently located in the financial district of a large city and equipped to make quick transfers of certificates. A trust company meets these requirements. Accordingly we commonly find a trust company appointed to act as transfer agent.[1]

(*d*) *Depository.* — It sometimes happens that stockholders and bondholders are called upon to deposit their securities with a trustee while a reorganization of the financial affairs of a corporation is being worked out. A trust company is commonly chosen as the trustee and depository in such cases. If the reorganization results in an issue of new securities to be exchanged for old, such exchange is effected through the trust company. The reputation of trust companies is so well established that no one hesitates to entrust his securities to such a depository.

(*e*) *Fiscal agent.* — A fiscal agent is one who takes care of certain financial affairs for another. Individuals as well as corporations use fiscal agents. We have already observed, in the case of Mr. T———, how an individual uses a trust company as a fiscal agent. Some of our nonprofit-making corporations, such as churches, hospitals, colleges, and charitable societies, appoint trust companies as fiscal agents. The extent to which their financial affairs are turned over to the trust company is defined in the agreement. In some cases they have the fiscal agent simply look after the investment of funds. In other cases the fiscal agent may take over complete

[1] The New York Stock Exchange, the great market place where millions of shares are bought and sold weekly, regards quick transfer of ownership so important that it requires all corporations whose shares are bought and sold there to have a transfer agent in the Borough of Manhattan in New York City. This creates much business for the trust companies in that city.

financial management, including collection of contributions, the payment of current expenses, the making of repairs and improvements to property, and the keeping of all financial records.

In the case of profit-making corporations, the officers of the corporation usually look after the firm's fiscal affairs. For the convenience of bondholders, however, a fiscal agent is usually appointed for the payment of bond interest. When bond coupons become due they are presented for payment to this fiscal agent, usually a trust company. Either the owner of the bond presents and cashes the coupons, or, more commonly, his bank does it for him. Prior to the interest-paying date, the corporation must, of course, deposit with the fiscal agent the amount of funds necessary to pay the coupons when presented. The tendency is for our large corporations to have a fiscal agent for this purpose in both New York and Chicago. In this way owners of bonds may receive their interest with a minimum loss of time.

B. Why We Have Trust Companies

(Advantages of long life, of specialists in various phases of trusts, and of financial responsibility; other activities of trust companies)

We found that when Mr. T——— came to select a trustee he chose the Security Loan and Trust Company. Why did he choose a trust company rather than a personal friend to act as trustee? There were three chief reasons:

A trust company has long life. — Mr. T——— had serious doubts as to whether a personal friend could complete the task. The trustee must be in good health not only upon the death of T——— and his wife, but also when their grandchildren become of age. Under the circumstances T——— was convinced that only a corporation with an indefinite life

would do as a trustee. He needed an incorporated trustee; in other words, a trust company.

A trust company has specialists on its staff. — Mr. T——— might feel confident that he could select a friend who was thoroughly familiar with Detroit real estate, and could, therefore, take care of that part of the estate adequately. But this friend might know very little about stocks and bonds, and still less about legal matters connected with trust estates. The trust company, however, handled such a large volume of trustee business that it could hire experts in these various fields of operation. It had on its staff a specialist in real estate, a specialist in securities, and an experienced lawyer. Their advice was available on any problem arising in connection with Mr. T———'s estate.

A trust company is financially responsible. — Mr. T——— desired to have his affairs handled by one who was thoroughly responsible. His securities and other valuable papers were to be kept by the trustee. He wanted to feel that they were absolutely safe. Furthermore, he saw advantages in having a trustee backed by sufficient capital, so that any business undertaking could be completed without a hitch. In these matters Mr. T——— felt that a trust company was superior to an individual. The capital and surplus of the trust company, amounting to several hundred thousand dollars, were an assurance of financial ability and strength. Mr. T——— felt that he was dealing with a trustee who was financially strong, as well as with a capable and long-lived one.

For most types of trusteeships, trust companies are superior to individuals as trustees. For small trusts, operating for a short time, an individual may serve quite well. But for trusts of large amounts, extending over a period of many years, the trust company is superior. These points of superiority help

to explain why trust companies have become so prominent among our financial institutions in recent years.

A trust company is preferable to individual trustees because:

1. **It does not die**
2. **It does not go abroad**
3. **It does not become insane**
4. **It does not imperil the trust by failure or dishonesty**
5. **It does not resign**
6. **It has no sympathies or antipathies and no politics**
7. **It is absolutely confidential**
8. **It is invariably on hand during business hours and can be consulted at all times**
9. **It never neglects its work or hands it over to untrustworthy people**
10. **Its experience and judgment in trust matters are beyond dispute**

— From an advertisement of a trust company

Most corporations prefer trust companies to individuals as trustees. — Another reason why trust companies have developed is that corporations find them superior to individual trustees. When a railroad company is issuing mortgage bonds to run for fifty years, the trustee, holding the mortgage,

must have uninterrupted existence. The work of registrar and transfer agent for corporations can be done best by a trust company, since this work calls for a careful, responsible party, located in the financial district near the stock exchange, and keeping regular business hours every working day in the year.

Trust companies usually carry on other activities. — Nowadays, trust companies in practically all states are permitted by law to do a general banking business in addition to their trust business. Most trust companies take advantage of the opportunity to engage in banking in order to enlarge the scope of their business and make greater profits. Evidence of this union of trust companies and banks may be seen in the names of some of these institutions, such as Atlantic Bank and Trust Company, First Savings and Trust Company, and Merchants Loan and Trust Company. The federal government, which has supervision over national banks (as a state government has over state banks), permits national banks to install trust departments to handle trusteeships. Many of them have taken advantage of the opportunity. Thus there is a tendency for trust companies to take on banking activities and for banks, especially the larger ones, to take on trustee activities. When one steps into the lobby of a large bank or trust company to-day, he usually finds a savings department (performing the functions of a savings bank), a commercial banking department (performing the functions of a commercial bank), a bond department (performing the functions of a bond house), a safe-keeping department (for the storage of valuables), and a trust department (performing the services here discussed).

These various departments develop business for one another. If a customer has turned over his estate to the trust department, he will probably find it convenient to rent

a safe-deposit box in the same institution for the keeping of his valuable papers. Some of the securities to be stored in his safe-deposit box will probably be purchased from the bond department, while his deposit and checking account will be placed, as a matter of course, in the commercial banking department. Similarly, one who has been a customer of the bond department may be introduced to, and become a customer of, the trust department or the banking department.

Furthermore, the various departments serve one another. If the trust department has in an estate some stocks and bonds which are of uncertain value, and does not know whether to sell or hold them, it may obtain expert advice from the bond department. When the trust department has securities to sell or to buy for estates, it is sometimes able to obtain better terms through its own bond department than through outside firms. Cash on hand for various estates may be deposited in the banking department, while the safe-keeping department will take care of the important records and documents belonging to the trust department.

The organization of the trust department depends on its activities. — In our smaller cities trust companies are occupied almost entirely with individual trusts. They find persons, especially wealthy persons, in the community for whom they may act as trustees; persons whom they may aid in drawing up a will; incompetent persons for whom a trustee is needed. In trust companies handling this type of business a simple organization is found. The board of directors elects a man, known as trust officer, to head the trust department and to be responsible for its management. Under the trust officer may be found assistants, who are specialists in such matters as real estate, the making of wills and contracts, investments, and taxation.

Trust companies in our largest cities are occupied, not only

with individual, personal trusts, but also with corporate trusts. In these cities, and especially in New York, are found not only the main offices of our principal corporations, but also the leading bond houses which float the stock and bond issues for these corporations, and the stock exchanges where the securities change hands. Accordingly, trustees under corporate mortgages, registrars, and transfer agents of stock, fiscal agents, and depositories are needed in these cities. In some of the large trust companies of New York and Chicago, the business done for corporations may even come to exceed that done for individuals. When a trust company handles corporate trusts, the organization of the trust department usually provides for experts in such matters as mortgages, the registry and transfer of securities, and corporation law. The organization must be adapted to the type of work done by the trust department.

Trust companies have a bright future. — Trust companies have attained their present prominence because they have met certain needs in modern society. The development of the United States has brought about a great increase in wealth. This has meant the appearance of many thousands of millionaires and of many more possessed of smaller fortunes. The management and distribution of these fortunes have created a need for trust companies. Furthermore, there has been a tendency among some wealthy persons to project their fortunes into the distant future; to create long-time trusts for hospitals, libraries, universities, and for other benevolent purposes; to place their successful businesses in trust so as to hold them intact and prevent their disruption at the death of the principal owner. This projection of fortunes into the future has called for the services of trust companies. Then, too, the past fifty years have witnessed a remarkable growth of corporations, which, in turn, has

brought business to trust companies. Added to these forces at work has been the tendency toward department-store banking, a tendency on the part of banks to install trust departments and of trust companies to add banking departments.

The future of trust companies depends on the future operation of these forces. Trust companies will continue to grow if the forces producing them continue to operate. It appears now that such will be the case. Wealth continues to increase; the number of rich persons is growing; plans to project large fortunes into the distant future are being made continually; corporations are growing in number and in size; banks are finding it more and more profitable to add trust departments. The work of trust companies seems destined, therefore, to expand.

In the process of handling trusts, these companies will have more and more funds committed to their charge. They will be seeking investments for these funds. In making their investments they will be shifting funds from savers (the trustors) to users. In so doing they will be assisting the construction of factories, public utility plants, and homes; they will be promoting transportation, manufacturing, and agriculture; they will be aiding the development of our national resources; they will be helping to obtain the satisfaction of human wants.

Summary. — The management of other persons' affairs has given rise to trustees. When the management is a simple task, extending over a short period of time, an individual may make an acceptable trustee. But when the affairs to be managed are complicated and extend over a period of many years, a trust company makes a superior trustee. A trust company possesses the advantage of financial responsibility, indefinitely long life, and the experience of an expert staff. Trust companies work both for individuals and corporations. For

individuals the chief work is serving as managers of living trusts and of trusts for incompetent persons, and as executors and administrators of the estates of deceased persons. For corporations the principal tasks are acting as trustee under mortgage agreements; as registrar and transfer agent for shares of stock; and as fiscal agent, taking charge of certain funds. Most trust companies find it profitable to combine a regular banking business with their business as trustee. The future promises a steady growth to trust companies, in view of the development of corporations, and the increasing number of wealthy persons, many of whom create trusts running into the distant future.

QUESTIONS

1. How do you distinguish between banking and trust-company work?
2. How did trusteeships originate? Are they more or less common than one hundred years ago? Why?
3. T——— appoints a trust company to manage his property, pay the income to himself and wife, and divide the principal later among his children. Who is the trustor here? The beneficiaries? The trustee?
4. List the advantages of a trust company over an individual trustee. Why has not society always had trust companies?
5. Write out an original, concrete example of a case where a trust company serves a useful purpose as:
   (*a*) Trustee for incompetents
   (*b*) Trustee for living trustor
   (*c*) Fiscal agent
   (*d*) Trustee under mortgage
   (*e*) Administrator of an estate.
6. Why is a trustee necessary in the case of a corporation mortgage bond, and not necessary in the case of an individual's mortgage loan?
7. In 1863 an officer of the New York and New Haven Railroad Company secretly issued more stock of that company then the charter authorized. A number of persons suffered serious losses as a result of his action. Show how these losses would have been prevented if a trust company had been acting as registrar of stock for the railroad company.

8. Distinguish between the duties of a registrar and a transfer agent. Why are trust companies generally chosen for this work?

9. Why is a trust company likely to be a customer of bond houses? May it have a bond department itself? What would be the advantage of having its own bond department?

10. In most states the law permits a person, in making a will, to determine what shall be done with his property for only a limited number of years after his death. For example, the law may permit a person to say what shall be done for thirty years after death, but might not allow him to dictate what should be done with his property for one hundred years after death. Why should the law limit the time a man may control his affairs after death? Would such a law prevent a gift being made to a university to be used as long as the university is in existence? If a man plans in his will to control his property for thirty years after death, why will he probably deal with a trust company? In what capacity will the trust company serve?

11. Some trust companies offer to furnish, free of charge, a competent attorney to assist an individual to draw up his will, provided the trust company is named executor of the will. How can the trust company afford to do this?

12. "The growth of large fortunes means more business for trust companies." Explain.

13. Suppose a trust company purchases a $1,000 public utility bond for an estate which it is managing. Suppose the public utility company fails and the bond proves worthless. Does the loss fall on the estate which the trust company is managing or on the trust company itself? Is this just? Why? Suppose the bond had advanced in value to $1,200, and at that price the company sold it. To whom would the $200 profit go? Why?

14. "Trust companies are another of the many financial middlemen that shift funds from savers to users." Show how this is true.

TOPICS FOR FURTHER STUDY

The Work of Trust Companies:

Holdsworth, *Money and Banking*, Fifth Edition, chap. XVIII.
Moulton, *Financial Organization*, Revised Edition, chap. XVI.
Moulton, *Money and Banking*, Part II, pp. 219–225.
Willis and Edwards, *Banking and Business*, chap. XXI.
Phillips, *Readings in Money and Banking*, chap. XV.

CHAPTER XVIII

INSURANCE COMPANIES

A. The Principle of Insurance
B. The Types of Insurance
C. The Financial Aspects of Insurance Companies
D. The Services of Insurance Companies

A. The Principle of Insurance

(Early marine insurance; spreading the loss; determining the premium)

Insurance appeared in Europe centuries ago. — During the Middle Ages the chief enterprise in which capital was employed on a large scale was over-sea trading. Many individuals were interested, therefore, in the risks attending such commerce, and were anxious to avoid, or insure against, these risks. Accordingly, in the seacoast towns of Europe, especially in Italy, we find instances of insurance on ships and cargoes as early as the thirteenth century. A person, or group of persons acting together, assured (or insured) the owner of the vessel that, in case the vessel were lost, a lump sum would be paid to the owner. For this assurance (or insurance) the owner paid the insurers a certain amount, known as the premium. Cargoes could be insured apart from the vessel itself. Those who assumed the risk of loss were called the "underwriters," because they wrote their names under the agreement.

In England these marine underwriters, or insurers, usually met the owners of ships and cargoes in the coffee houses, one of which, toward the end of the seventeenth century, happened

to be owned by Edward Lloyd. Lloyd systematically gathered a great deal of valuable information about ocean commerce. This gradually drew to his house more and more of the underwriters, until, by the middle of the eighteenth century, almost all of the marine insurance was written at Lloyd's. The world-famous house of Lloyd's was not, therefore, an insurance company, but a meeting-place for individuals who bought and sold insurance. Each of the individuals who cared to assume a part of a given risk — say a ship and cargo leaving Liverpool for Naples — would write under the contract his name and the amount he agreed to be liable for in case of loss. Each of the underwriters received his percentage of the premium paid by the owner of the ship. If the ship came safely into port, the underwriters were the gainers; that is, they had funds with which to pay other losses. If the ship were lost, they paid the loss. The money with which to pay the loss came from premiums paid to them by owners whose ships were not lost. To-day, Lloyd's still exists as a place in London where financially responsible individuals offer insurance. The forms of insurance have, of course, greatly multiplied. In addition to marine insurance, a person can to-day insure at Lloyd's a long list of other risks, including accidents, loss of works of art, epidemics, bad weather interfering with games or special events, the outbreak of wars, strikes, riots, and the loss of or injury to the voice or fingers of musical artists.

Insurance spreads losses among a large number of persons. — From the foregoing account of early marine insurance, we can see the nature of insurance. Certain persons face risk of loss; they are willing to pay other persons a sum of money to relieve them of the risk; if a loss occurs they are compensated; if no loss occurs, the sum paid remains with the insurer, which means that it is generally used to help pay later

losses. Insurance may be said, therefore, to be a device by which a number of persons, each contributing a sum called the "premium," make up a fund or pool which goes to pay whatever losses are suffered by the members. The fund may be managed either by the members themselves, in which case it is known as mutual insurance, or by an outside party for profit. Hence we see that insurance is not primarily to prevent losses from occurring, but is to spread the losses among a large number of persons.

The premium is based chiefly on the risk involved. — Since the money to pay the losses must come from the premiums collected, it is evident that the greater the losses, the higher the premiums must be. If experience showed that out of 1,000 ships leaving port, on the average 15 were lost, the insurers could easily figure the premium to be charged on each ship in order to have enough money in hand to pay the losses and leave a reasonable profit for managing the business. So with other kinds of insurance. Past experience in fire insurance shows the number of fires per thousand buildings of different types; in life insurance, past experience shows the number of deaths per thousand persons at different years of age; in automobile insurance, the number of accidents of different kinds per thousand cars. Insurance companies cannot tell, of course, which building will burn nor which persons will die. It can only tell, fairly accurately, how many buildings are likely to burn or how many persons are likely to die within a given period. With this information the insurance company can proceed to work out the premiums necessary to pay the losses. Insurance premiums are based, therefore, on the risks involved, as these have been disclosed by past experience.[1]

[1] As past experience changes, the premiums also change. For example, experience shows that the death rate is declining; in other words, that people on the average are living longer. This operates to reduce life-insurance premiums.

Not only does the risk determine the total amount to be raised by premiums, but it also determines how much of the total each man shall pay. If a ship were old and poorly built, therefore more likely to sink, the owner would have to pay a higher premium to insure it than another man would pay who owned a ship that was modern and more strongly built. The owner of a frame house with wooden shingle roof must pay more for fire insurance than the owner of a house, similarly located, built of brick with a tile roof, since the risk of burning is greater in the former type of house. Similarly, of two men in sound health, one twenty years of age and the other forty, the latter will have to pay more for life insurance than the former, since the chance of his early death is greater than that of the younger man.

The premium is reduced by interest on invested funds. — Another factor affecting the amount of the premium is interest received by the insurance company on its invested funds. Insurance premiums are usually paid in advance. This means that the company may invest the premiums and receive interest therefrom for some time before the losses need to be paid. Interest, therefore, will help make up the fund needed to pay losses; for this reason less need be collected in premiums. Interest is an especially important item in long-time life-insurance policies. By investing yearly premiums of a modest amount and compounding the interest on them for many years, a large sum is accumulated with which to pay the policy when due.

Loading charges added to the net premium give the gross premium. — The premium we have been considering is the pure or net premium, the net amount needed to pay the losses. In addition to the net premium something must be paid to meet the expenses of the insurance company. Commissions must be paid to agents for getting the business; funds for

officers' salaries, taxes, upkeep of offices, and other expenses must be provided. These expenses, known as "loading charges," are prorated among the policy holders. When added to the net premium, they make the gross premium, which is the amount actually paid by the policy holder.

The gross premium quoted by an insurance company is usually the amount to be paid annually per $1,000 of insurance. For example, a fire-insurance premium, or rate, of $5.20 means $5.20 per $1,000 of insurance for one year. If the policy holder desires $5,000 insurance, he pays five times $5.20, or $26, for a policy running one year.

B. The Types of Insurance

(Fire and marine; credit; liability; title; bonding; accident and health; life)

Men feel the need for insurance, not only against the risk of loss of property, but also against risks to their person, as the risks of personal accident, sickness, and death. Wherever serious risks have arisen, which could be insured against, we find a type of insurance developed to meet the risk. The principal types for the protection of property will be discussed first, then insurance protecting persons will be taken up.

Fire. — The owner of a building is always confronted with the possibility of loss from fire. Most owners prefer to carry insurance rather than run the risk of a heavy loss. If a mortgage loan has been placed on the property, the lender is almost certain to require the owner of the building to carry insurance, to protect the lender in case fire destroys the building.

To obtain insurance, the property owner applies to the local agent of a fire-insurance company, who has a supply of blank policies on hand, as well as a schedule of rates. The agent

looks up the rate applying to the property in question (see accompanying table), then fills out the policy. The payment of the premium completes the deal. A fire may not only destroy a business man's building and merchandise, but may also deprive him of the use of his location. This usually means moving, temporarily at least, to a new location, possibly paying higher rent, and suffering the loss of customers and therefore of profits. Special forms of fire-insurance policies are offered to protect businesses against losses of this nature.

Fire Insurance Rates

The fire insurance rate on a given property depends on a number of conditions. The more important are:

1. The kind of a water system and fire department the city has.
2. The material and type of construction of the building.
3. The proximity to other buildings and their combustibility, or tendency to burn. The statistics show that about 30 per cent of all fires spread to adjacent buildings.
4. The contents of the building in question. This factor is the most important of all. "Occupancy hazard," as it is called, causes 90 per cent of all fires. Hence the rate, or premium, charged varies markedly according to the contents of the building.
5. The presence or absence of private fire-fighting equipment, such as automatic sprinklers, watchmen, pails of water kept at convenient places, and fire extinguishers.

It will be seen from the above why residences, schools, and churches get a lower rate per $100 of insurance than stores and factories; and why a two-story, frame building occupied by a paint store and repair shop, keeping in the basement excelsior, turpentine, wooden boxes, and a furnace, raises the rate not only for itself, but for all other buildings near by.

Fire Loss and Fire Insurance

Fire losses in the United States amount to about $570,000,000 a year, or $1,500,000 every day.

Fires take a toll of human lives exceeding 14,000 every year.

The amount of fire insurance outstanding in this country is about $118,000,000,000, with annual premiums amounting to over $700,000,000.

Marine. — Marine insurance, as noted before, is the oldest form of insurance. Originally, it protected owners of ships and cargoes on the seas. In recent years, however, the term "marine"

insurance has been so broadened that, in this country at least, it threatens to lose all connection with the ocean. Not only is the term applied to insurance of goods moving on the lakes and rivers, but also to goods moving by railroad, motor truck, and parcel post. When a bond house sends a bundle of bonds by registered mail, they are insured against loss by a "marine" policy. Our leading American fire-insurance companies write these various types of marine insurance.

Credit. — Suppose the Western Dry Goods Company, which is engaged in the wholesale dry goods business in the Far West, has sold $2,500,000 worth of dry goods to retail merchants scattered over fifteen states. In pricing its goods it has added an amount sufficient to cover its normal or average loss from the fact that a few customers will not pay for the goods they have purchased. If experience shows that this loss is one half of one per cent of sales, then on the $2,500,000 of goods recently sold, the company will expect to lose about one half of one per cent, or $12,500. If every customer pays his bill, the company will have $12,500 more profit than it estimated. If, however, the crops fail, or business depression hits the territory, the retailers will fail in greater numbers than estimated and the Western Dry Goods Company will lose perhaps $50,000 or $60,000 in unpaid accounts, instead of $12,500. This might be enough to turn the whole year's business into a net loss instead of a net profit. By buying a credit-insurance policy, the Western Dry Goods Company can insure itself against this risk.

Credit-insurance companies, as indicated in the foregoing example, will not insure against the usual or normal loss from bad accounts, because this loss is regarded as a certainty, and insurance is for uncertainties. But losses from uncollectible accounts in excess of this normal amount are insurable. The premium charged is based on the nature of the business

whose accounts are insured, the amount of the policy, and, most important of all, on the financial standing and credit rating of the customers. The insurance company may learn the financial standing and credit rating of each of the hundreds, perhaps thousands, of customers of the Western Dry Goods Company by looking them up in the reports of a credit agency, probably in Dun's *The Mercantile Agency Reference Book* or Bradstreet's *Credit Rating Book*.[1]

Liability or casualty. — The law holds persons liable for the damages caused to other persons or to the property of other persons. If a contractor, in digging a foundation, loosens the wall of an adjacent building, he is liable for the damage. If a workman is killed because of defective machinery, the employer is liable. If the driver of an automobile carelessly strikes another automobile, he is liable for the damages to the other car. If an elevator in a store falls, causing injury to the occupants, the owner of the store is liable. It is eminently just and fair that in a society as full of risks as the one in which we live, every person should answer for the damage he causes. It is natural that the contractor, the employer of labor, the automobile owner, the storekeeper responsible for the running of the elevator, as well as others who face these serious liabilities, should seek to buy themselves free of these risks. One serious mishap might cost them so much that the year's business would be turned from a profit into a loss, possibly, indeed, throw them into bankruptcy. To assume such risks is the business of *liability* insurance, or, as it is frequently called, *casualty* insurance.

There are some fifty different branches of casualty insur-

[1] These well-known credit agencies have developed nation-wide investigation facilities which aim to gather financial information on every business, large or small, in the country. On the basis of this information, the agency will give each business two ratings: one for *financial worth* and the other for *credit*.

ance. Some, it will be seen, are damages not traceable to any individual. The principal forms are workmen's compensation, burglary, holdup, plate glass, engine breakage, riot and civil commotion, automobile, accident, health, windstorm, rain and water damage, hail and crop damage, elevator, and fidelity. A few of the more important of these will be explained briefly.

More than forty of our states have passed laws, known as *Workmen's Compensation Laws*, which hold employers liable for personal injury to workers, arising out of their employment.[1] Employers generally take care of this liability by carrying insurance. When a workman is injured, settlement is made by the insurance company. Employers are usually able to count the expense of such insurance as one of the costs of doing business and pass it on to the public in the selling price of the product.

Automobile Insurance

There is an old saying that the automobile has divided society into two classes, *the quick, and the dead.* This suggests the need for insurance. Casualty insurance companies offer the following forms of automobile insurance:

1. *Fire.* Insures against loss by fire.
2. *Theft.* Insures against loss by theft.
3. *Public liability.* Insures against liability for damages arising out of bodily injuries to others. In case the insured person is sued, the insurance company will defend him.
4. *Property damage.* Insures against liability for damages to the property of others.
5. *Collision.* Insures against damages to one's own car, caused by collision.

In farming communities *hail* and *crop damage* and *live stock* insurance are of importance. Tornado or *windstorm* insurance is carried both in cities and in rural districts. When employers are expecting strikes they take out *riot* and *civil commotion* insurance. County fairs, sporting events, department-store special sales, and other occasions in which in-

[1] In case the injury results solely from his own intoxication or from his deliberate intention, then the injured worker cannot collect damages.

clement weather might ruin the attendance are commonly protected by *rain* insurance.

Title. — One of the most serious risks attending the ownership of land or the lending of money on the security of land is that the title to the land may be defective. Defects may creep into a title in many different ways from the time, perhaps a century ago, when the state deeded the land to the first private owner, down to the present owner. If a defect in the title is discovered, it may cause a heavy loss to the owner, or to the lender of money, since it may reveal that some one else is part or full owner of the property. If an owner or a lender wishes to insure himself against possible loss arising in this way, he may do so through title-insurance companies. Such companies investigate the " chain of title," and agree in return for a premium to: (*a*) defend all lawsuits brought against the title, and (*b*) pay any losses up to a certain amount named in the policy, if such losses are suffered on account of defective title.

Bonding. — One morning, a few years ago, a seventeen-year-old clerk employed in one of the large banks of Chicago walked out of the bank with a bundle under his arm. The bundle contained three quarters of a million dollars' worth of bonds. In this particular case the thief was captured before he had disposed of much of the property. But suppose he had escaped. Who would have suffered the loss? Many persons suppose the bank would have been the loser, since the bank owned the bonds. On the contrary, the bank would have lost nothing, for it carried insurance to protect itself against such acts of dishonesty on the part of employees. Such insurance is usually referred to as *bonding,* while the person occupying the responsible position is said to be bonded.

Other examples of the everyday use of such insurance are: A contractor, upon signing a contract with a school board to

erect a new school building, must put up a bond that he will complete the job by the time agreed, for the price agreed, and according to the plans and specifications. An uncle, who has been appointed guardian for some nephews and nieces who were suddenly left orphans, is required by the court to put up a bond for the faithful performance of this duty. A man sues another for damages and wins his case, being awarded $5,000. The loser appeals the case to a higher court, but the case cannot be heard for a year. In the meantime the loser may make away with all of his property. To protect the winner of the case against this risk, the court orders the loser to put up a bond. A person elected to a responsible public office, say sheriff, or county treasurer, is required by law to put up a bond for the faithful discharge of his duties.

A bond, as the term is used here, means a written contract whereby one party "binds" himself to be responsible for the acts or neglect of another in certain relations between the latter and a third party. The party holding himself responsible is called the "surety." The surety may be an individual, but nowadays is usually a corporation making a specialty of bonding. The business of providing such bonds is sometimes referred to as *fidelity insurance*, since it is designed to insure the financial fidelity of individuals.

We turn now to the principal forms of personal insurance.

Different individuals need different kinds of personal insurance. — Probably no two persons need exactly the same kind and amount of personal insurance. One man may need insurance to protect his family in case of his death. Another may need it to protect his creditors who have loaned him money. A third may need it to provide money at his death by which the executor of his will may pay inheritance taxes and other settlement expenses. A young woman, working in an office, may need insurance to support an aged mother, in

case death takes the daughter first. Another, having no dependents, may desire only that insurance provide an income in case of accident or sickness. While it is true that no two cases are exactly alike, yet many of them are sufficiently alike to be served by the same *type* of policy. Accordingly, we have certain types of policies designed to meet certain types of needs. The chief needs and the policies adapted to those needs are as follows:

Chief Needs	Form of Policy Adapted to Need
1. Income in case of accident	*Accident*
2. Income in case of sickness	*Health*
3. Life insurance for limited number of years only	*Term*
4. Life insurance for indefinite number of years	*Ordinary life*
5. Life insurance combined with savings plan	*Endowment*
6. Life insurance for workers in one establishment	*Group*
7. Insurance and savings to be paid for by the week	*Industrial*

A few words of explanation may be offered for each of these seven types of policies.

1. *Accident.* — In practically every railway depot there is a sign over the window of the ticket office offering insurance against travel accidents. A policy may be bought, protecting the person for one day, one week, one month, or three months, while traveling. It does not protect him against *all* kinds of accidents, however, and this is the principal objection to it.

For a larger premium a general, or unlimited, accident policy may be obtained from the agent of a casualty insurance company. Such a policy states that in case of accidental death the principal sum, commonly $10,000, will be paid. If this accidental death happens on a train or in an elevator, the company agrees to pay twice the principal sum. If the accident does not result fatally, the company promises to pay

a certain sum each week, say $20, for partial disability, and perhaps $50 a week for total disability.[1]

2. *Health.* — Health insurance, sometimes called sickness insurance, assures an income in case of illness. Most of the policies provide that payment will be made by the company if the policy holder is unable to carry on his regular work and if he is attended by a physician. In order to reduce the tendency to " play sick," the companies usually offer a greatly reduced rate if the insured person will agree to have his policy so made out that the insurance company pays only after the second week of illness.

3. *Term insurance.* — Term insurance offers life insurance for a limited number of years only. Suppose I am investing practically all I have in a new undertaking, which will be completed in ten years. If I live through the period I shall have my funds free again and may not need insurance after that. If I die during the ten years, my venture will fail and will carry down the savings of a lifetime. To protect my dependents, I need life insurance for the ten years. Or, perhaps a creditor is asked to lend me $10,000 to help finance the new venture. He knows that if I die during the ten years his $10,000 may be lost, whereas if I survive, his loan is safe. He therefore wants a policy on *my* life for $10,000 to run for ten years. Or, suppose I have three small children. For the next eighteen or twenty years they will be dependent on me, after which time they will be independent. I need term insurance for their protection only for the next twenty years. If I die, they are protected ; if I live, they won't need protection.

[1] In our discussion of liability insurance we saw that the state has placed the burden of accidents to workers on the employer. This, of course, applies only while the laborer is at work. If he wants insurance against accidents happening while not at work he must buy such insurance himself.

Term insurance meets such needs as those just cited; it is temporary protection, similar to fire insurance. Since the insurance company may not have to pay anything out, the rate, or premium charged, is comparatively low.

4. *Ordinary life.* — The most common form of life insurance is straight life, or ordinary life, insurance. The insurance is payable at death, whether death occurs the day after the policy is issued or many years later. This form of life insurance is particularly useful to individuals desiring to protect their dependents for an indefinite time; that is, until death. It is a useful form of policy also to wealthy persons desiring to provide their estates with ready cash, so that inheritance taxes can be paid at death without sacrificing their property. In recent years many business enterprises have insured the lives of their principal executives, naming the business as beneficiary. The premiums are paid annually by the business and considered one of the regular costs of doing business. If the business leans heavily on one man, his death would seriously derange affairs. Accordingly, it improves the standing of the business, particularly with creditors, to have insurance carried on the life of this "key" man.

To accommodate persons who desire to concentrate their premium payments in the productive years of life, insurance companies offer ordinary life policies which call for the payment of premiums for a limited number of years only. For example, a man may estimate that he has thirty years of salary-earning life remaining, although he expects to live longer than that. He wants his insurance all paid up by the end of thirty years, so that he will not be called upon to pay premiums after his income ceases. To accomplish this purpose he may take out a *thirty-payment* ordinary life policy. Since he is concentrating his payments within a limited

number of years, each payment will be somewhat larger than the ordinary plan calls for.

5. *Endowment.* — Endowment insurance promises payment at death, if death occurs within a specified period, and also promises payment at the end of this period in case of survival. For example, if a man takes a twenty-year endowment insurance policy of $5,000, he agrees to pay a premium of so much each year for twenty years or until death, if death occurs during the twenty years. The insurance company, on the other hand, agrees to pay his beneficiary $5,000 if the insured person dies during the twenty years, or if he survives, then to pay him $5,000 when the twenty years are up. To many persons it appears a " heads I win, tails you lose " proposition. The insured or his beneficiary will get $5,000 no matter whether he lives or dies. They are apt to forget that the insured is charged for all this; that the premium is made high enough to cover both risks — the risk that he may die and the risk that he may survive.

Endowment policies are especially useful when a person desires to combine saving with insurance protection. A man may have purchased a home with a $5,000 mortgage on it. He wants to pay off the mortgage at the end of ten years; furthermore, he wants the assurance that in the event of his death during the ten years the mortgage would be paid and his home pass to his widow free of debt. A ten-year endowment policy for $5,000 serves both purposes. A father may desire a lump sum of cash fifteen years hence to put his son through college. Another man may desire a lump sum when he is seventy years old in order to protect his old age. Still another, inclined to be a spendthrift, may find that the only way he can save and protect his dependents, is to obligate himself for heavy insurance premiums. Endowment insurance serves all of these cases.

6. *Group.* — When a business firm takes out a blanket insurance policy covering the lives of all or a large proportion of its employees, it is called group insurance. Group insurance usually provides for the payment of a few hundred dollars in case of the death of an employee, an amount about adequate to cover the expense of a decent burial. Group insurance policies may be obtained also to cover sickness and old age of employees.

When a firm takes out a group policy, it does so, not as a matter of philanthropy, but as a business proposition. It believes that such a provision will attract to it a better and steadier class of workers, and therefore prove to be profitable.

GROUP POLICY TOTAL PUT AT $8,000,000,000

Survey Shows 1928, With About $1,500,000,000 New Insurance, Was Biggest Year.

The greatest expansion in the volume of group insurance since its introduction in 1911 took place in the past year, according to William J. Graham, second vice president in charge of group insurance for the Equitable Life Assurance Society. More group insurance was placed in 1928, he said, than in any previous single year.

"It is estimated," Mr. Graham declared, "that approximately $1,500,000,000 of new group insurance has been purchased during the last twelve months for more than 1,000,000 American workers. This means that there is now in force in the United States approximately $8,000,000,000 of group protection, which is considerably more than was invested in all kinds of life insurance in the United States as recently as the close of 1901.

7. *Industrial.* — Industrial insurance is regular life insurance, devised to meet the particular needs of industrial workers. Since these workers, as a rule, cannot afford to pay a large premium at one time, industrial insurance is arranged on the basis of small premiums, payable weekly.

Since many wage earners would fail to keep up their

weekly payments unless some incentive or reminder was provided, a collector calls for the premium at the house. The face amount of the average industrial policy is less than $200, many of the policies being written on the lives of children.

Industrial insurance renders a service to our wage earners, because it brings life insurance within their reach and, through the endowment policy, affords an incentive to save. Furthermore, an industrial insurance company that has a great many policy holders in one community may employ a nurse and give her services free to their policy holders. This reduces the death rate and thus pays the company, while its benefits to the wage earners are obvious.

But industrial insurance is expensive. Since the death rate is higher among this class of people than for the population as a whole, the charges must be high to cover this high mortality. Then, too, the work of collecting the premiums by a personal call each week adds to the cost of the insurance. It would be considerably cheaper if the wage earner could take out a regular life policy with one of the standard companies, paying his premiums quarterly or yearly. Unfortunately for this class, such a plan calls for too large an outlay at one time. Some companies have partly met this difficulty by offering ordinary insurance on a *monthly* premium basis and many wage earners carry such insurance.

Industrial insurance must be meeting a real need, for there were over 81,800,000 policies in force in 1928. If each of these policies were written for a different individual, it would mean that seven out of every ten persons in the total population of the United States carried an industrial policy. These policies represented insurance to a total amount of over $15,440,000,000.[1]

[1] *Life Insurance Year Book*, 1928, p. A–327.

C. The Financial Aspects of Insurance Companies

(Financial importance of insurance companies; chief investments)

Insurance companies have become important investment agencies. — The accompanying table shows that the American people are paying over four billion dollars every year to insurance companies. This means that these companies have become important financial institutions. Some forms of insurance, such as fire and casualty, do not accumulate great sums for investment. Their policies run for only a short time (usually one year), which means that losses and expenses take most of the money away soon after it is paid in. But life insurance is different. Most life-insurance policies run for a long time. This means that policy holders are paying in premiums for many years, to be invested and the interest compounded for them. Accordingly, life-insurance companies accumulate large assets which are held in trust for their policy holders. As the chart on page 327 shows, these assets amounted in 1928 to over thirteen billions of dollars.

Financial Importance of Insurance

In a recent year the American people paid for life insurance alone $2,384,000,000.

The total amount paid in the same year for the other forms of insurance, such as fire, marine, automobile, and casualty, was about $1,916,000,000.

The total paid for all kinds of insurance was, therefore, approximately $4,300,000,000, an average of about $37 for every man, woman, and child in America.

The number of life-insurance policies outstanding was 97,618,000, calling for total insurance of $71,690,000,000.

From 1906 to 1926 while the population of the country was increasing 37 per cent, the life insurance written on the lives of our people was increasing 480 per cent, or 13 times as rapidly.

Since these assets belong, in reality, to the policy holders, it is important that they be handled wisely by insurance officials.[1]

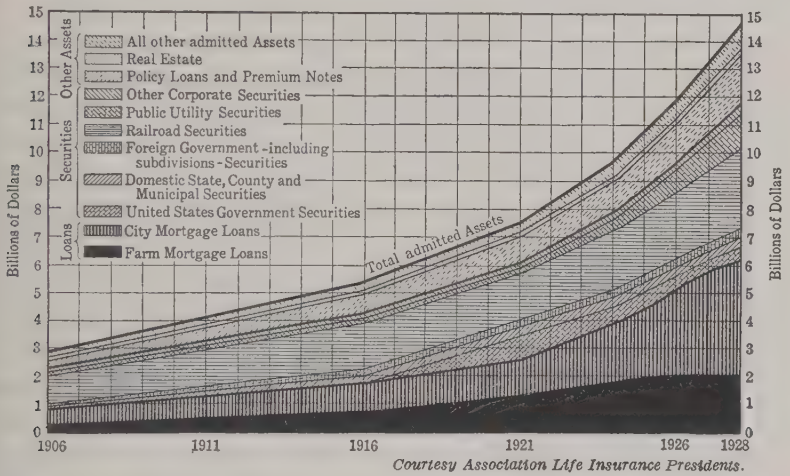
[1] Prior to 1906 the government paid little attention to the way in which insurance officials handled their policy holders' money. As a result of the

Life-insurance funds are invested mainly in mortgage loans and in bonds. — Those responsible for the investment of insurance funds aim to place the funds in forms of investment that are safe and, at the same time, yield good returns in interest. They must, of course, confine their choices to investments permitted by the insurance laws of the state. Since most life-insurance policies run for a long time, the funds may well be placed in long-time investments. These requirements for safe, good-yielding, long-term investments are satisfactorily met by mortgage loans and by high-grade bonds. Real-estate mortgage loans are usually made to run for five years or more, yield approximately 6 per cent interest, and if carefully made, are safe. (See discussion of mortgage loans in Chapter XV.) High-grade bonds, especially those issued by our national, state, and municipal governments, and by our strongest railroad and public-utility corporations, are typically safe and usually run for many years. Although the yield is lower than on mortgage loans, averaging between 4 and 5 per cent, bonds have the advantage of being readily marketable in case the insurance company needs cash. In view of these advantages possessed by mortgage loans and bonds, it is not surprising to find 80 per cent of life-insurance assets held in these two forms in 1928 (see accompanying chart).

What these investments mean to the development of our country can scarcely be exaggerated. By 1928 the purchase and improvement of farms had been financed to the extent of two billion dollars, city real-estate development had been aided to the extent of three billions, chiefly for construction of buildings, while four and one-half billions had gone into

"insurance scandals" of that year, the state of New York passed laws strictly regulating such matters. Other states have followed this example, so that to-day the finances of insurance companies are legally supervised.

projects undertaken by governments and large corporations, such projects as road and street construction, school buildings, water works, railroads, telephone lines, gas plants, and electric-light and power systems. Insurance companies, gathering small sums here and there from millions of scattered policy holders, shift the money into the hands of those who need funds to develop the nation's resources.



Courtesy Association Life Insurance Presidents.

GROWTH OF LIFE INSURANCE ASSETS, 1906–1928

The chart also shows in what forms of investment our life-insurance companies place their funds.

D. THE SERVICES OF INSURANCE COMPANIES

(Assume risks; promote security in business; aid credit extension; prevent losses; encourage saving; protect beneficiary's money)

In addition to the general service just mentioned — that of assembling and moving funds into the hands of those who are developing our resources — insurance companies perform a number of services more directly connected with insurance. We may summarize those services in concluding our discussion.

Insurance companies assume certain risks of loss that would otherwise have to be borne by the individual. — The most important service of insurance is that of relieving the individual of risk. There are thousands of risks confronting the individual in modern life, many of which can be insured against. If a person would rather pay to have certain of his risks borne by insurance than to bear them himself, insurance companies render him a service in assuming such risks.

Insurance companies promote security in business undertakings. — A business enterprise faces many uncertainties. Suppose a new manufacturing enterprise is organized, and a site for the building is purchased. Is the title to the land clear so that no question will be raised as to the real owner? A building is constructed on this site. Will fire or earthquake or tornado destroy the building? A treasurer is employed. Will he handle the money honestly or will he prove to be a thief? Goods are sold on time. Will those owing the money fail to pay? Steam boilers are installed to run complicated machinery. Will the boilers "hold" and the machinery be safe as against human life, or will the boilers explode and the machinery claim a heavy toll of fingers, arms, eyes, and lives? A half-million dollars are borrowed, chiefly on the basis of the ability and character of the president of the corporation. Will he live to pull the business through and see the loan repaid, or will death endanger the loan by removing the chief executive?

Every one of these uncertainties, and many others as well, can be insured against. Business can dismiss many doubts on the ground that even if the worst does happen, insurance will take care of it. And thus certainty and confidence replace doubt and hesitation.

Insurance assists in the extension of credit. — We have seen already the importance of credit in modern society

(Chapter V). At the basis of most credit transactions insurance is found. Automobiles which are being purchased on the instalment plan must be insured against fire and theft. A mortgage loan on a building is protected by a fire-insurance policy. A bank, lending to the owner of cotton in a storage warehouse, requires him to carry fire insurance to protect the loan. When goods are shipped in international commerce, a marine-insurance policy protects the shipment. Money advanced to aid a venture, the success of which depends on a certain man, is protected by insurance on this man's life. So also may credit insurance protect sellers of goods against loss through bankruptcy of customers. As we have seen, it may protect businesses which are trusting employees with the handling of money. And it is commonly used to safeguard titles to property in which money has been invested.

Insurance companies strive to reduce and prevent losses. — While insurance operates primarily to spread the amount of any losses among a large number, most companies work to prevent losses. In some cases companies require preventive measures to be taken before a policy will be issued. An employer, for example, may not be given liability insurance unless he installs certain safeguards about his machinery. Automobile theft insurance may not be issued unless the car is equipped with certain locking devices. By education, also, insurance companies help to reduce losses. It is estimated that 75 per cent of fire losses are due to carelessness and neglect — that is, they are preventable. It is just as commendable and productive to prevent the destruction of a building by fire as it is to construct a new building. Fire insurance companies work to reduce carelessness and neglect, and to promote fire prevention. Similarly, life insurance companies are leaders in the various movements to increase health and decrease the death rate. The prevention of

accidents, including the " Safety First " movement, has been championed arc ntly by the insurance people. As our civilization becomes more complicated and fraught with greater risks, more agencies of warning and prevention are needed. Insurance companies are such agencies.

Insurance, especially life insurance, encourages saving. — Life insurance is one of the most important agencies of thrift in modern society.[1] Ordinary life policies may be considered saving for one's family or other beneficiaries, while endowment policies may be regarded as saving for one's self. Through insurance many persons undoubtedly save money that they would otherwise waste or spend for trivial things. By teaching people to think of the future, to regard their duty to those dependent on them, insurance performs a significant service.

Life-insurance companies may protect the beneficiary's money. — One section of every life-insurance contract provides for the manner in which the money is to be paid to the beneficiary, who is usually the wife. Too frequently the widow, having had little experience in investing considerable sums of money, becomes the prey of swindlers, or follows the advice of ignorant friends. The result is that she often loses the entire sum. A reliable authority recently stated that of the total money paid to beneficiaries in lump sums, seven eighths is lost or dissipated within three years.[2]

There are several ways of dealing with the problem. One way is for the widow to take her money to a reputable investment banker and have him put the funds in good bonds, or at least give her financial counsel. Another way is to place

[1] In 1928, as the chart on page 327 shows, life-insurance companies were responsible for about $15,000,000,000 of society's savings. This places them next to banks as an agency in collecting the savings of the people.

[2] Statement by Trust Department, National City Bank of New York.

the insurance money in trust with a trust company, and state in the trust agreement how the trust company is to handle the money and pay it over to the beneficiary. Still a third way is for the husband to arrange with the insurance company to pay the beneficiary, not in a lump sum, but in annual or monthly instalments. Such payments are called *annuities*. This and the second method are sometimes referred to as "insuring the insurance."

Summary. — Insurance, by grouping risks and charging each member of the group a premium, assembles a fund which is used to pay the expenses of management and the losses suffered by the members of the group. Pending the payment of losses, the fund is invested, thereby aiding industry and, at the same time, adding to the fund by the collection of interest. Especially important in this respect are the life-insurance companies whose policies run typically for a long time, causing the accumulation of large sums for their policy holders. These sums are invested, for the most part, in the development of farms and city real estate through mortgage investments, and in the projects of governments and corporations through the purchase of bonds.

QUESTIONS

1. "Insurance is not *primarily* to keep losses from occurring, but is to spread out the losses." Explain.

2. When insurance companies spend money to reduce and prevent losses, how does that help the insurance companies? How does it help the public? Why does it tend to reduce the cost of insurance?

3. Insurance men argue that if an automobile owner cannot afford to take out all five kinds of policies he should take out the Public Liability and the Property Damage policies. Why should these be regarded as more important than the other three?

4. A man took off his diamond ring and laid it by the lavatory in the public wash room of a hotel. While he was wiping his face the ring dis-

appeared. An insurance company paid the loss. What kind of policy was it? Do you think insurance of this kind tends to make people careless? Why, or why not?

5. How can an insurance company afford to offer to make good all amounts stolen from a bank by its employees? Does such an arrangement tend to make the employees more or less honest? Who pays for this insurance — the bank, the employees, or the public?

6. If you were about to accept a responsible position and had to "put up a bond," would you rather have a bonding company furnish the bond or have some "friend of the family" do so? Which do you think your employer would prefer? Why?

7. If you were an insurance agent, what kind or kinds of policies, and for what amounts, would you advise in each of the following cases:

(*a*) An engineer, thirty-six years of age, with an income of $4,800 a year, has a wife and three small children. He owns his own home valued at $10,000 with a $5,000 mortgage on it. His only life insurance at present is a $2,000 ordinary life policy.

(*b*) A clerk twenty-four years old and his wife aged twenty-two, a stenographer, spend their income as fast as they get it. They have no children, but are supporting her mother. Neither husband nor wife is insured. They hope some day to set up the husband in business for himself, but seem unable or unwilling to save for that purpose.

8. Business firms took up the idea of insuring their executives at about the same time that large-scale industry evolved, and about the time that heavy borrowing became the rule among our corporations. Are there close connections between these three movements? Explain.

9. Contrast group and industrial insurance with respect to who pays the premium, and how frequently the premium is paid.

10. The savings banks in some of our large cities have recently taken up the idea of combining insurance and a savings account. The various plans differ, but the general idea is to get the policy holder to make a monthly deposit in the savings bank, out of which the insurance company is to be paid its premium. What advantage do you see in this plan to the savings bank, the insurance company, and the policy holder?

11. It is said that about one fifth of all life-insurance policies issued are 20-year endowment policies. Commissions to salesmen are usually larger on an endowment policy than on any other, because the premium is larger on such a policy. May this be one reason why so many endowment policies are sold? Suggest other reasons.

12. Outline the kind of personal traits and training you think a life-insurance salesman should have. Should women enter this vocation in larger number? Give reasons.

13. Tell what you would advise a beneficiary to do (in each situation described in *a*, *b*, and *c* below) if she had $5,000 of insurance money just paid to her:

(*a*) She has two small children and can earn part of her support herself?

(*b*) She lives in a cottage which has a $3,000 mortgage on it?

(*c*) She is seventy years old and has no relatives?

14. Trust companies contend they should be appointed to take care of the beneficiary's money since they are in the same city as the beneficiary and can advise and consult personally with the beneficiary on financial matters.

On the other hand, insurance companies contend that they are better qualified to invest and manage the beneficiary's money, since the money will be kept in the pool and invested along with other funds in the bonds and mortgage loans of the company. In case one particular investment turns out badly, it is scarcely felt by any one beneficiary, whereas if one investment of a trust company turns out badly the particular estate suffers the entire loss, since the funds and investments of each beneficiary must be kept separate by the trust company.

The best-managed insurance companies pay to their policy holders about 4½ per cent interest on their funds. They contend that trust companies cannot do better if they invest in safe securities.

What do you think of the merits of these arguments?

15. Mutual insurance companies, which are especially prominent in the field of life insurance, are organized without capital stock, the policy holders being regarded as owners of the business. The policy holders select the trustees or directors to manage the business; whatever profits or savings would otherwise go to the stockholders are returned to the policy holders as dividends. In the case of life insurance, the policy holder is asked to state in which of the following forms he desires his dividend:

(*a*) He may take it out in cash;

(*b*) He may leave it with the company to purchase more insurance than the face of the policy calls for;

(*c*) He may leave it with the company to accumulate at interest;

(*d*) He may use it to reduce the premium he owes each year. This plan is used by more policy holders than any of the other plans.

Under what circumstances would each of these methods of using one's dividends be advantageous? What advantages and what disadvantages do you see in the mutual form of organization?

16. The statistician of one of the mutual companies recently worked out the following comparison regarding life-insurance companies:

	Stock	*Mutual*
Number of companies	86%	14%
Insurance in force	27%	73%
Assets	13%	87%

What do these figures tell you as to the size of the average stock company and of the average mutual company?

17. One of the oldest mutual life-insurance companies in America paid in 1918, as a death claim, its oldest policy. The face of the policy was for $3,500 and was taken out in 1846, having been in force 73 years. During the 73 years the policy holder paid in $1,316.08. His beneficiary drew from the company in 1918 the sum of $3,560.90, and the policy holder each year had received some dividends on his policy. The $60.90 above the face of the policy was the dividend for the last year. How could the company give back some dividends each year and still pay out in 1918 almost three times as much as the man had paid in?

18. From the chart on page 327 determine:

(*a*) The percentage of total assets in 1928 invested in farm mortgages; in city mortgages; in railroad securities. What were the percentages in 1916? In 1906? Account for the changes found.

(*b*) The growth in total assets from 1908 to 1918 and from 1918 to 1928. Why was the growth so much greater during the second 10 years?

19. A farmer may obtain a mortgage loan from an insurance company, a mortgage company, or a land bank (the last two explained in chapter XV). The fact that these three institutions compete with each other in lending money to the farmer, offers what advantages to the farmer? Is there similar competition in making city loans? What institutions compete in the city mortgage field?

20. "The main purpose of a bank is to assemble and lend funds, whereas this is only a secondary purpose with insurance companies." Explain.

TOPICS FOR FURTHER STUDY

1. The Services of Insurance Companies:
   Huebner, *Life Insurance*, chaps. I, II, III.
   Huebner, *Property Insurance*, chap. I.
   Gephart, *Principles of Insurance*, chaps. I, XI, XII.
   Riegel and Loman, *Insurance Principles and Practices*, chaps. I, V, X, XI, XII, XX, XXII, XXIII.

2. The Finances of Insurance Companies:
   Huebner, *Life Insurance*, chap. XXVI.
   Gephart, *Principles of Insurance*, chap. IX.

CHAPTER XIX

COMMERCIAL BANKS

A. The Work of Commercial Banks
B. Relations between Commercial Banks
C. Services Rendered by Commercial Banks

The most important financial institution in our society is the commercial bank. It is the most important for two reasons: first, because the combined resources of our commercial banks far exceed the combined resources of any other kind of financial institution; second, because practically every other financial institution, as well as every business firm, is more or less dependent on the commercial banks. It is the institution in which we place our funds on deposit when we desire to have a checking account (an account on which we may write checks, or orders to pay money). It is the institution to which most persons go when they need to borrow money. It is the institution we think of when the word "bank" is mentioned.

Commercial banking has developed with the needs of commerce. — Several centuries before the time of Christ, traders of the Mediterranean countries were using drafts and notes in carrying on their commerce. The collection of these instruments, especially when they called for payment in distant cities, became the task of specialists. These early specialists, or bankers, by establishing connections with one another, gradually came to arrange for the payment of goods and credit

instruments, without transferring any actual money. Trade and travel also made necessary the exchange of one kind of money for another. Accordingly, money-changing became an important part of early banking.

During the Middle Ages the growth of commerce in Europe caused banking to increase. The need for banking services was met in many places by the goldsmiths enlarging the scope of their activities. Their knowledge of the precious metals enabled them to determine the exact value of the different coins in circulation. Having on hand considerable quantities of coins and bullion, they were able to exchange coins of one mintage for those of another. Since they also had facilities for the safe-keeping of coins, customers gradually came to leave, or deposit, their coins, jewelry, and other valuables with the goldsmiths, who agreed to return the same when called for. As business grew, necessitating more payments between individuals, those who had money to their credit on the goldsmith's books presently discovered that, instead of withdrawing the coins to make payments to others, they might order the amount transferred on the books. That is, a person who owed money to another might accompany him to the goldsmith and order the amount transferred from his own account to that of his creditor. Or, still more conveniently, he might hand the creditor a piece of paper ordering the goldsmith to transfer the money; that is, use a check. In time, as opportunities for lending increased, the goldsmiths discovered that, since all depositors never called for their money at the same time, some of the money might be loaned out at interest. Of course they had to be careful not to lend too much lest they be caught short of cash. The money kept on hand to pay the depositors came to be known as the "reserve," and experience was the guide as to how much reserve was necessary. Under certain circumstances a 50 per cent reserve was needed;

under other circumstances a 20 per cent reserve or even less might be adequate. Doubtless, bank failures, occasioned by allowing the reserve to run too low, happened then, as now.

Besides lending at interest his own and some of his depositors' money, the early banker discovered another source of profit. He might hand his promissory notes, instead of cash, to those who called for money. This would save his cash for lending purposes, while it provided a substitute in circulation. Customers would readily accept these banker's notes if they were confident the banker could pay them in coin, since the notes were more convenient to handle than the metal. Accordingly, the notes would pass from hand to hand the same as money.

From these developments it may be seen that banking has its roots in the distant past. Money changing, making payments from place to place, safe-keeping, receiving deposits, making loans at interest, issuing notes — these activities sprang up in different times and places to aid the growth of commerce as well as to earn profits for the bankers. As society has developed, the importance of these various activities has naturally changed. At the present time money changing, for example, is less important than formerly, while the handling of credit instruments, the receiving of deposits, and the making of loans have become of commanding importance. In earlier times bankers could do little to promote saving; to-day they do much. Until recent years banking was typically in the hands of individuals as proprietors; now it is almost universally carried on by corporations. When banking was a small affair and concerned only a few persons in the community, it could run with little or no supervision on the part of the government; nowadays it concerns every one, through its management of our savings and its loans to business enterprises. Accordingly, for the protection of the

public, we find the government exercising more and more control over it. As conditions in society have changed, banking has changed, adapting itself to social needs.

A. The Work of Commercial Banks

(Organization of a new bank; typical operations; the bank statement)

In order to understand better the work of a commercial bank, suppose we organize a new bank and follow through a few of the principal operations performed by the bank. Before we can organize our new bank, we must decide whether we want to start a national bank or a state bank. What is the difference?

National banks are under the control of the federal government; state banks of the state government. — National banks are so named because they are chartered and supervised by the national government. This means that they must be organized according to the conditions of the national banking law and be subject to whatever legislation Congress sees fit to enact over such banks. For example, the law at present requires national banks to submit reports of their condition periodically to the Comptroller of the Currency (an official in the Treasury Department at Washington), and at the same time to publish these reports in a local newspaper. The law also requires bank examiners to drop in unannounced from time to time and examine the financial condition of national banks. There are also certain provisions regarding the amount of capital national banks must have, the kind of loans they may and may not make, the conditions under which they may issue and place in circulation their own bank notes, and other details. There are about 7,500 national banks in the country. They are to be distinguished by the fact that they must use the word " National "

in their names (for example, Merchants National Bank, or First National Bank).

State banks receive their charters and supervision from the various states. There are, accordingly, forty-eight different sets of laws governing state banks. In the main, however, these laws are much alike and the stricter ones follow the national banking law. Generally speaking, the older states in the northern and eastern parts of the country have strict regulations for their banks, while the states in the South and parts of the West have somewhat less strict laws. Including about 2,000 trust companies, which are organized under state law, there are about 18,000 state banks in the entire country.[1]

Organizing a national bank. — Assuming that we decide to start a national bank, we secure an application blank from the Comptroller of the Currency at Washington and fill it out. Under the law, the amount of capital that we must subscribe depends on the size of the city in which we are located. Assuming that our bank is to be in a city of 30,000 population, our required capital is at least $100,000. We interest a sufficient number of persons in the city to subscribe for all the 1,000 shares of stock, par value $100 each ; but have them agree to pay $120 for each share, as in the savings bank organized in Chapter XIII. This will give us $20,000 surplus, a desirable advertising feature, since a surplus suggests financial strength. If the Comptroller is satisfied that another bank is needed in the community, he will approve our application and issue to us a certificate, or charter. When our stockholders have paid in full for their stock, our balance sheet appears as follows:

[1] A few states allow the operation of private banks, which are not incorporated or supervised at all. Experience proves that disastrous failures are rather common among private banks, due largely to the fact that such banks are not examined by outside examiners, and that the caliber of private commercial bankers is usually below that of the men running national and state banks.

Resources		*Liabilities*[1]	
Cash	$120,000	Capital stock	$100,000
		Surplus	20,000

We rent a building and prepare for business. Among other legal requirements, we must subscribe for stock in the Federal reserve bank of our district to an amount equal to 6 per cent of our own capital and surplus. This makes the commercial banks the owners of the reserve bank of their district.

The legal reserve requirements of banks in the Federal Reserve System is as follows:

	Of deposits payable on demand (per cent)	*Of deposits payable after notice (time deposits) (per cent)*
Banks located in central reserve cities (New York and Chicago) must carry in their reserve bank	13	3
Banks located in reserve cities (about 60 large cities, other than New York and Chicago) . . .	10	3
Country banks (all others)	7	3

Cash Reserve Required by Law

(For example, if a bank located in a reserve city had demand deposits of $3,000,000 and time deposits of $1,500,000, the reserve required would be 10 per cent of $3,000,000, or $300,000, plus 3 per cent of $1,500,000 or $45,000, a total of $345,000. This amount would have to be placed in the Federal reserve bank of the district.)

As yet the Federal reserve authorities have required that only half of this subscription be actually paid in. So we are re-

[1] Instead of heading this "Liabilities and Ownership" (see page 103), we will follow the prevailing banking practice and call it simply "Liabilities." For the left-hand heading, banks use the word "Resources," rather than "Assets."

quired to pay for 3 per cent of $120,000 or $3,600 worth of stock in the reserve bank. This will take $3,600 of our cash away and give us as a resource in its place " Stock in Federal reserve bank, $3,600." The law also requires us to place a cash reserve, amounting to a certain percentage of our deposits, in the reserve bank (see table preceding page). We have no deposits as yet, but we expect to have some soon, so we send to the reserve bank of our district $10,000 for this purpose.

We know that some of our customers will ask us for drafts on New York or Chicago banks with which to settle out-of-town obligations, just as traders, centuries ago in Europe, applied to the early bankers for the means of making payments in distant places. Therefore, we select a correspondent bank in each of those cities and send some cash to those correspondent banks so that we can write drafts on them. We place $4,000 in a Chicago correspondent bank and $8,000 in a New York one. This takes $12,000 more of our cash away; there is substituted for it the item " Due from other banks $12,000." Our balance sheet, when we are ready to open for business, then appears as follows:

Resources		*Liabilities*	
Cash	$94,400	Capital stock	$100,000
Stock in Federal reserve bank	3,600	Surplus	20,000
Legal reserve in Federal reserve bank	10,000		
Due from other banks	12,000		
Total	$120,000		$120,000

Some typical operations of the bank. — A bank is called upon to perform hundreds of tasks for its customers. Every time the bank engages in a transaction its statement of resources and liabilities is affected. A few of the most common

transactions, with the effect on resources and liabilities, are here suggested:

1. Customers deposit in checking accounts, $5,200. This increases cash on the Resources side by that amount and creates a corresponding liability on the opposite side, since the bank now owes, or is liable to, customers for that amount. If we use + to indicate an increase and − to indicate a decrease the effect is as follows:

Resources		*Liabilities*	
Cash	+ $5,200	Deposits subject to check	+ $5,200

2. Some depositors open savings accounts on which we agree to pay 4 per cent interest, if left three months or longer. If we take in $1,700 of such deposits, the transaction would be recorded as follows:

Cash	+ $1,700	Time Deposits . . .	+ $1,700

3. We are asked to discount ten promissory notes totaling $80,000, each running 90 days. To discount these notes means to deduct the interest in advance, in other words, to buy the notes at their present value. If our interest rate is 6 per cent, for three months the interest, or discount as it is called, amounts to $1,200. We then stand ready to pay $78,800 for the notes. Instead of taking away this sum in cash, the borrower says: "Just credit my deposit account with the amount, and I will check it out as I need it." This leaves our cash intact, but increases our deposit liabilities $78,800, since we are now liable to him for that amount. The $1,200 deducted as discount is put into an account called "Interest deducted but not earned," or sometimes, "Unearned discount." It goes on the Liabilities side because it is one of the claims of the owners against the bank, similar to capital stock and to surplus. The promissory notes are

carried at their face amount under the title "Loans and discounts." This item is a resource because the bank owns the notes and expects to collect them later. The result is:

Resources		*Liabilities*	
Loans and discounts . .	+ $80,000	Deposits	+ $78,800
		Interest deducted but not earned	+ 1,200
	$80,000		$80,000

This shows how a bank may hold its cash, even while making loans. It also illustrates how deposits arise out of loans just as truly as they arise out of the carrying of cash into the bank.

Bringing together the results of these three transactions with the balance sheet on page 342, we have:

Cash	$101,300	Capital stock	$100,000
Stock in Federal reserve bank	3,600	Surplus	20,000
		Deposits subject to check	84,000
Reserve in Federal reserve bank	10,000	Time deposits	1,700
Due from other banks .	12,000	Interest deducted but not earned	1,200
Loans and discounts . .	80,000		
	$206,900		$206,900

4. A customer, wishing to make a remittance to an eastern firm, requests a New York bank draft, amount $1,200. The customer writes a check on his deposit account in favor of our bank to pay for the draft. We draw, or write, this draft on our New York correspondent. This reduces the amount we have on deposit in our New York correspondent bank and also reduces our liability to our customer as a depositor:

Due from other banks .	− $1,200	Deposits	− $1,200

5. Business men bring in for deposit:

(*a*) *Checks on our own bank to the amount of $1,480.* — Since these checks are drawn by certain of our depositors in favor

of the business men who are also depositors, the amount of the checks is simply subtracted from certain accounts and added to certain other accounts in our bank, as the goldsmiths did 500 years ago. Our total deposits are unchanged by this transaction.

(*b*) *Checks drawn on other banks in the city, $12,650.* — We will collect these checks through the Clearing House, which is an association formed by the banks in a city. Pending the collection of these checks we hold them as a resource under the title "Exchanges for the Clearing House." Our deposit liabilities to customers are, of course, increased by this amount.

(*c*) *New York drafts, $380.* — We mail these drafts to our New York correspondent for collection, and since our correspondent will then owe us $380, we add this amount to the item "Due from other banks."

(*d*) *Checks drawn on banks in other cities, $21,670.* — These checks will be sent for collection either to our correspondents in New York and Chicago or to our Federal reserve bank. If we assume the latter, then the amount we have on reserve in the Federal reserve bank is increased by $21,670. The net effect of these four deposits is as follows:

Resources		*Liabilities*
(*b*) Exchanges for Clearing House	+ $12,650	Deposits + $34,700, *i.e.*, the total of the four deposits after allowing for those in (*a*).
(*c*) Due from banks .	+ 380	
(*d*) Legal reserve in Federal reserve bank . .	+ 21,670	
	$34,700	

6. Like the goldsmiths of old, we believe we can conserve some of our cash, as well as gain some desirable advertising, by placing in circulation our own bank notes.[1] The law re-

[1] Only national banks and Federal reserve banks issue circulating notes. The government has placed a tax of 10 per cent a year on notes of state banks, which makes their issue unprofitable.

DEPOSITED WITH

AMERICAN EXCHANGE NATIONAL BANK

SUBJECT TO THE FOLLOWING REGULATIONS

In receiving items for deposit or collection, this Bank acts only as depositor's collecting agent and assumes no responsibility beyond the exercise of due care. All items are credited subject to final payment in cash or solvent credits. This Bank will not be liable for default or negligence of its duly selected correspondents nor for losses in transit, and each correspondent so selected shall not be liable except for its own negligence. This Bank or its correspondents may send items, directly or indirectly, to any bank including the payor, and accept its draft or credit as conditional payment in lieu of cash; it may charge back any item at any time before final payment, whether returned or not; also any item drawn on this Bank not good at close of business on day deposited

James L. Robinson

GREENSBORO, N. C. 10/5 1928

	DOLLARS	CENTS
CURRENCY	28	
SILVER		
CHECKS	126	30
	16	65
	23	14
	$ 194	09
TOTAL - -		

SEE THAT ALL CHECKS AND DRAFTS ARE ENDORSED

DEPOSIT TICKET

Depositors fill out such a ticket on making a deposit. It is checked by the teller and goes to the bookkeeper to be credited to the depositor's account.

quires that we place, as security behind our notes, government bonds of certain kinds, of an amount equal to the notes we are issuing. Having decided to issue $5,000 of bank notes, we purchase that amount of the proper kind of government bonds through a bond dealer in New York City. Assuming that these bonds can be bought at par, we pay $5,000 for them by writing a draft on our New York correspondent bank, thereby reducing by that amount the balance we have in that bank ("Due from other banks," − $5,000). In order that any bank notes presented at the Treasury in Washington may be paid promptly in cash, the law requires every national bank issuing notes to deposit, in cash, 5 per cent of the amount of its note issues. For us that would mean 5 per cent of $5,000, or $250. We therefore ship $250 of our cash to the Treasury in Washington. Thus far the effect would be:

	Resources	
U. S. government bonds	+	$5,000
Due from other banks	−	5,000
5 per cent redemption fund	+	250
Cash on hand	−	250

Presently the crisp new bank notes, with our own name engraved on the face, arrive and are signed by the president and cashier of our bank. We pay out the notes in the process of cashing checks for our depositors. Since these bank notes are promises of our bank to pay the bearer on demand, they are liabilities of our bank. Hence if we pay them out in cashing depositors' checks, we simply substitute one liability for another.

	Liabilities	
Deposits	−	$5,000
National bank notes outstanding	+	5,000

7. The notes of transaction 3 on page 343 are paid. The typical way by which loans are paid off is by the borrower

writing a check on his deposit account in favor of the bank. Since the ten notes were discounted, the bank collects only the face amount, $80,000. The customer's check for $80,000 reduces our deposit liabilities to that extent and at the same time wipes out that amount of resources in the form of "Loans and discounts." The discount on the ten notes, $1,200, which was placed in the account "Interest deducted but not earned" is now ready to be transferred out of that account into "Undivided profits," since that interest is now earned and collected. The books are therefore affected as follows:

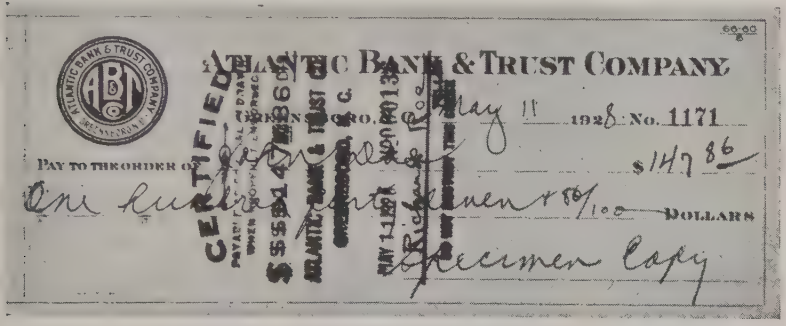
Resources		*Liabilities*	
Loans and discounts . .	− $80,000	Undivided profits . .	+ $1,200
		Interest deducted but not earned . . .	− 1,200
		Deposits	− 80,000

Assembling the items in transactions 4 to 7 on pages 344–348 with the balance sheet as it appeared at the end of 3 on page 344, we learn the present condition of our bank:

Cash	$101,050	Capital stock	$100,000
Stock in Federal reserve bank	3,600	Surplus	20,000
		Deposits subject to check	32,500
Reserve in Federal reserve bank	31,670	Time deposits	1,700
		Bank notes outstanding .	5,000
Due from other banks . .	6,180	Undivided profits . . .	1,200
Exchanges for Clearing House	12,650		
U. S. government bonds .	5,000		
5 per cent redemption fund	250		
	$160,400		$160,400

8. A depositor asks to have his check for $1,200 certified, or guaranteed, by the bank. This is frequently done when the check is to be sent to a stranger, because strangers will trust checks certified by a known banking institution when

they will not trust personal checks. The bank at once subtracts the amount from the depositor's account, stamps the



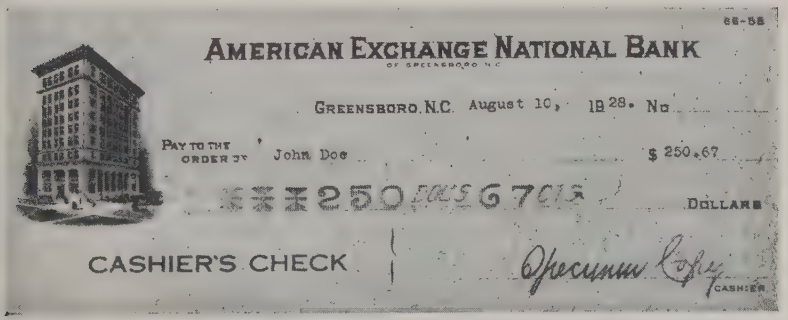
CERTIFIED CHECK

When a depositor gets his check certified by his bank, it becomes an obligation to pay of the bank. Accordingly, it will be received without question practically anywhere.

check "certified," and thenceforth it becomes a liability of the bank to pay. The result is:

Individual deposits	—	$1,200
Certified checks	+	1,200

9. A customer is involved in a business transaction in which he is asked to pay $1,600 by "Cashier's check." He asks



CASHIER'S CHECK

Drawn by the cashier on his own bank, such checks are used to pay obligations of the bank and are sometimes used by customers likewise.

us for the cashier's check, which is an order drawn by the cashier of a bank on his own bank. Like a certified check, it is the obligation of a bank and more acceptable as a means of payment than a personal check. If the customer pays for the cashier's check by giving the bank $800 in cash and $800 by his personal check the result would be:

Resources		*Liabilities*	
Cash	+ $800	Deposits	− $800
		Cashier's checks outstanding	+1,600

10. We purchase, or discount, notes of a customer for $60,000, running six months, the rate of discount being 6 per cent. We pay the customer in cash.

Loans and discounts	+ $60,000	Unearned discount	+ $1,800
Cash	− 58,200		

11. Public utility and railroad bonds to the amount of $8,000 are purchased, payment being made by cashier's checks. Salaries and rent are paid in cash, $980, which must be deducted from our undivided profits as well as from our cash.

Bonds	+ $8,000	Cashier's checks outstanding	+ $8,000
Cash	− 980	Undivided profits	− 980

Consolidating these transactions, merging the results with the balance sheet we had at the close of transaction 7 on page 348, and arranging the items in the order in which they usually appear in a bank statement, we have the following result:

Loans and discounts	$60,000	Capital stock	$100,000
U. S. and other bonds	13,000	Surplus	20,000
Stock in Federal reserve bank	3,600	Undivided profits	220
Reserve in Federal reserve bank	31,670	Demand deposits	1,700
Due from other banks	6,180	Time deposits	30,500
Exchanges for Clearing House	12,650	Bank notes in circulation	5,000
Cash in vault	42,670	Interest deducted but not earned	1,800
5% redemption fund	250	Cashier's checks	9,600
		Certified checks	1,200
	$170,020		$170,020

The foregoing statement may be compared with the following actual statements of two New York banks, one drawn up in the usual form, the other in a new form.

National Bank of Commerce in New York

MAIN OFFICE
31 NASSAU STREET

ESTABLISHED 1839

MIDTOWN OFFICE
269 MADISON AVENUE

Statement of Condition, March 27, 1929

RESOURCES

Loans and Discounts	$351,066,288.09
United States Securities including those Sold Under Repurchase Agreement	73,595,330.00
Other Bonds and Securities	13,337,492.18
Stock of Federal Reserve Bank	1,950,000.00
Banking House	4,000,000.00
Cash in Vault and in Federal Reserve Bank	41,958,570.00
Due from Banks and Bankers	244,167,077.15
Interest Accrued	2,101,377.60
Customers' Liability under Acceptances	57,095,089.70
	$789,271,224.72

LIABILITIES

Capital	**$25,000,000.00**
Surplus	**40,000,000.00**
Undivided Profits	**9,317,847.76**
Dividend Payable April 1, 1929	**1,125,000.00**
Deposits	593,757,179.61
Bills Payable	1,500,000.00
Reserved for Interest, Taxes and other Purposes	7,430,759.70
Unearned Discount	1,741,951.27
Agreements to Repurchase United States Securities Sold	593,743.75
Liability as Acceptor, Endorser or Maker on Acceptances and Foreign Bills	108,804,742.63
	$789,271,224.72

B. Relations between Commercial Banks

(Clearing-house associations; correspondent relationships)

We have already seen how, both in early times and at present, banks are called upon to make payments in distant places.

A Bank Statement
that any Man or Woman can Understand

Condensed Statement as of December 1st, 1928

The Bank Owes to Individuals, Firms, Corporations and Banks	**$283,708,435.31**
A conservative banker always has this indebtedness in mind, and he arranges his assets so as to be able to meet any request for payment.	
For This Purpose We Have:	
Cash	**$43,486,767.11**
(Gold, Bank Notes and Specie) and with legal depositories returnable on demand.	
Checks on Other Banks	**52,828,070.30**
Payable in one day.	
U. S. Government Securities	**67,254,529.23**
Loans to Individuals and Corporations	**56,577,395.74**
Payable when we ask for them, secured by collateral of greater value than the loans.	
Bonds	**18,404,152.40**
Of railroads and other corporations of first quality and easily salable.	
Loans	**44,744,027.00**
Payable in less than three months on the average largely secured by collateral.	
Bonds and Mortgages	**19,669,035.36**
Banking Houses	**9,132,436.30**
All located in New York City	
Other Real Estate	**108,500.00**
Total to Meet Indebtedness	**$312,205,513.44**
This Leaves a Surplus of	**$28,497,078.13**

Which is a guarantee fund upon which we solicit new deposits and retain those which have been lodged with us for many years.

THE CORN EXCHANGE BANK

Established 1853

WILLIAM AND BEAVER STREETS

and 66 Branches located in all Parts of the City of New York

A BANK STATEMENT IN A NEW FORM

The development of business has caused banks to establish connections with one another, in order that they may handle their work quickly and economically. These banking connections help to bring about a banking system, whereby banks work together to aid one another and to aid business.

Commercial banks have become united in two ways: (1) Banks within the same city have formed clearing-house associations; (2) Banks in different cities have established correspondent relationships.

Clearing-house associations benefit banks in the same city. — The many dealings between banks in the same community have caused the formation of a clearing-house association in practically every city. Such an association exists to promote the mutual welfare of the banks. The principal tasks performed by these associations are:

Clearing checks. — Suppose there are only two banks in a town, one on the east side of Main Street and one on the west side. The customers of East Bank deposit in it some checks drawn by persons who keep their funds in West Bank. Suppose that on April 25 East Bank has $20,000 in checks drawn on West Bank; a clerk from East Bank takes the $20,000 of checks across the street and presents them at the window of West Bank. Does the clerk in West Bank pay out $20,000 in cash? No, he passes through the window a bundle of checks drawn on East Bank which West Bank had received from its depositors. This bundle amounts to $18,500 and offsets that amount of checks brought in by the clerk from East Bank. West Bank pays only $1,500 in cash to settle in full. This is a simple way of " clearing " checks, and is the method used wherever there are only a few banks in a town.

But when there are a considerable number of banks in a city, it would require too great an amount of time and energy for clerks to be passing back and forth visiting the various

Photo from Brown Bros.

NEW YORK CITY CLEARING HOUSE

Messengers from the various banks meet at the clearing house daily to exchange checks. The checks brought to the clearing house by a particular bank are largely offset by those taken away; hence only the net balance needs to be paid. This plan saves an enormous amount of time and labor for the banks.

banks, delivering and receiving checks. Hence, in order to economize, the banks arrange to have their clerks meet at a certain hour, in a convenient room centrally located, and there exchange or " clear " their checks. Such a place is known as a clearing house. A clearing house, therefore, does not do a banking business; it keeps neither checks nor cash; it is simply a meeting place for representatives of banks, desiring to clear checks speedily and economically. It usually requires only a few minutes to exchange the bundles of checks and compute the balance each bank owes or has coming to it. Settlement of balances may then be made in cash or, as is more commonly done, with drafts drawn on a correspondent bank or a Federal reserve bank.

Fixing exchange charges for collecting out-of-town items. — Suppose Carter deposits in East Bank, Nashville, Tenn., a check drawn on a bank in San Diego, Cal. East Bank is expected to collect that check for Carter; in fact, Carter may receive credit at once for the amount of the check. In other words, East Bank may pay the check a week or ten days before the check can get to San Diego and the funds be returned to East Bank in Nashville. East Bank expends time and money collecting a check for Carter. Should Carter be charged something for collecting this check? It seems perfectly fair that he should be charged a fee sufficient to reimburse the bank for its expense. Yet East Bank will not ask Carter to pay, say 15 cents, for collecting this check unless all the other banks in the city agree to do likewise, for fear Carter will take offense and transfer his patronage to some other bank. However, if all banks in the city make such a charge, all customers of all banks are treated alike. The clearing-house association is the logical organization to draw up a schedule of charges for collecting out-of-town checks, notes, drafts, and other items. These charges are commonly called "exchange."

Fixing the rate of interest on deposits. — In the absence of any agreement among the banks regarding the rate to be paid on deposits, some banks will try to attract customers from the others by offering to pay a higher rate of interest on deposits than the others pay. This introduces an undesirable form of competition — undesirable from the standpoint of the banks because it lowers profits, and if carried too far, undesirable from the standpoint of the public because in order to pay high interest the banks must receive high interest; this involves risky loans and thereby endangers the safety of the banks.

Clearing-house associations have eliminated this form of competition by setting the rate of interest which their members shall pay depositors.

Making a service charge for small checking accounts. — Banks not only take care of depositors' funds for them, but they also furnish free check books and undergo other expenses in serving depositors. A bank expects the depositor, in turn, to leave on deposit in his checking account a sufficiently large balance so that, by lending out this balance, the bank can collect enough interest to make a profit. For example, bankers in some cities say that, when a depositor keeps less than $100, on the average, in his deposit account, the account is unprofitable to the bank; when he keeps $100 or over in his account it is profitable. Accordingly, through a rule of the clearing-house association, the banks in many cities charge depositors a monthly fee of perhaps 50 cents, if they do not maintain an average balance of, say, $100 or over.

Conducting examinations of banks in the association. — One of the greatest fears of a banker is that a " run " will start on his bank.[1] One of the important causes of a " run " is the

[1] A "run" is a sudden demand for their money on the part of a large number of depositors.

failure of another bank in the city, for this failure may cause depositors to become nervous and demand their money. Accordingly every bank is interested in preventing the failure of every other bank in the city. One method of preventing failure is to have frequent examinations made of the banks by expert examiners, who can warn those in charge of affairs when weaknesses or dishonesty are discovered. Since the federal or state examiners do not get around very often, the clearing-house associations in a number of cities have employed examiners to look into the condition of the banks at frequent intervals. Each bank thus examined feels that it has something to gain by submitting to the expense and trouble of these examinations if the result is to make the management of every other bank more prudent.

Correspondent banks perform services for one another. As already pointed out, in order to accommodate its customers, a bank must have contacts with banks in other cities. When the volume of business passing between two given banks is heavy enough to justify those banks entering into definite arrangements with each other, they become correspondent banks. The correspondent relationship usually implies that the smaller bank will keep a deposit of funds in the larger bank, while the larger bank agrees to aid the smaller bank in certain ways. The smaller bank is usually, though not always, located in a small town or in a suburb of a large city, while the larger bank is located in the financial district of a prominent city. The principal relationships are the following:

The larger bank collects checks and other instruments for the smaller bank. — When Carter deposits in East Bank, Nashville, Tenn., a check drawn on a bank in San Diego, Cal. (see page 355), the Nashville bank will not mail that check to the San Diego bank with the request that the funds be shipped back

to Nashville. Such a procedure would be too costly. East Bank has a correspondent in Chicago. The Chicago correspondent tells the Nashville bank, " Send us all your checks and other instruments payable in the Middle and Far West, and we will collect them for you." The Nashville bank does so, and so do hundreds of other banks in the West and South. Into each large Chicago bank the mails pour daily a stream of checks, drafts, notes, bond coupons, and other banking instruments. The Chicago banks sort these according to the cities where they are payable. They are then forwarded either to the banks at which they are payable or to correspondent banks in the cities where they are payable. For example, the Chicago bank receiving the San Diego check from Nashville would send the check either directly to the San Diego bank or to a correspondent in San Diego if it has one there. In all probability the check would not go alone, for, during the same day, the Chicago bank would have received other instruments payable in San Diego. The San Diego bank would make payment to the Chicago bank probably by a draft on its Chicago or its New York correspondent bank, thereby avoiding shipment of actual cash. The Chicago bank would credit its Nashville correspondent on its books. In this way Carter gets his money or a deposit credit in Nashville, the Nashville bank is reimbursed by having its deposit increased in its Chicago correspondent, while the San Diego bank settles without shipping any money.[1]

The smaller bank writes drafts on its larger correspondent. — In operating our new bank (see page 344) we found customers asking for New York bank drafts with which to settle out-of-town obligations. Such drafts can be furnished because the smaller banks have a deposit in New York banks, upon which

[1] The Federal reserve banks, to be discussed in the next chapter, also play an important part in this task of collecting checks throughout the country.

they can draw. New York bank drafts are good at face value anywhere in the United States, because all banks are willing to receive them, knowing that they can be forwarded to New York and deposited with correspondents there for immediate credit.

Similarly, through correspondent banks in other parts of the world, our larger American banks can furnish customers with traveler's checks, letters of credit, and foreign drafts. By means of these instruments goods may be purchased abroad, tourists may pay their expenses, and remittances may be made to distant lands.

The smaller bank may borrow from its larger correspondent. — Occasions frequently arise making it necessary for one bank to borrow from another. This is especially true of country banks which lend largely to farmers. Their loans in the spring or autumn to aid in the planting or harvesting of crops, the purchase of live stock, or other farming operations, may deplete their own funds and force them to seek assistance from other banks.

If the country bank is a member of the Federal reserve system (see Chapter XX), it will borrow from the Federal reserve bank. However, the great majority of country banks are state banks and are not members of the Federal reserve system. Therefore they do their borrowing from their city correspondents. As security for these loans, the country banks pledge either bonds or promissory notes of their customers.

The smaller bank and the larger bank exchange information. — A large city bank may desire to know the credit standing and paying ability of a merchant in a small town, the request for such information having come from one of its customers, say a wholesaler in the city. Or the city bank may want to know the condition of the crops or of some local industry.

Such information would be sought of its correspondent in the small town.

Occasionally the smaller bank wants to learn the credit standing of some large city concern. The credit files of its city correspondent probably contain the information desired, and such information is forwarded to the smaller bank.

The smaller bank may have idle funds which it desires to employ by the purchase of commercial paper or bonds. It asks its city correspondent to select good paper or bonds for it and make the purchase.

Thus the large city bank and the small bank are mutually helpful. Each can provide the other something. They help to give the nation a banking system.

C. Services Rendered by Commercial Banks

(Conserving society's cash; making of loans; collections; transfer of funds; miscellaneous services)

We may now bring together the outstanding contributions made to our society by commercial banks. Most of these services have been revealed in the preceding discussion; a few words will summarize them. The economizing of cash and the making of loans, however, deserve brief discussion.

Banks enable society to utilize its cash most effectively. — We know that most persons who come into the possession of money deposit it in a bank. This relieves them of the necessity of guarding their money and at the same time permits them to pay their obligations by means of checks. To the individual the advantages of checks over cash in making payments have already been discussed (pages 188–190). To society the great advantage of bank deposits and checks is that they conserve society's cash. They enable the greater part of the cash to be kept in bank reserves rather than in circula-

tion. The cash in reserve supports a much larger volume of deposits than the cash itself amounts to, thereby making possible more business than could be done on a cash basis. As we know, most of the transactions in society are paid by checks drawn on deposit accounts. These checks are promptly deposited; in working their way home to the banks on which they are drawn, they largely offset each other, thanks to clearing houses, correspondent banks, and the Federal reserve system. Cash is needed, therefore, only to settle balances between banks and to provide for the calls of depositors for hand to hand money. It has thus developed that one dollar in our bank reserves can support some ten to fifteen dollars of deposits. The deposits, through checks, do nearly all of the actual buying in society, while the much smaller amount of cash stands behind the deposits, ready to be used whenever and wherever cash is called for. Banks hold the deposits and the cash reserves. They move the checks to their destination. They settle balances with each other. They thereby help to make society's supply of cash do more than it could otherwise do.

Banks, by means of loans, aid the creation of goods. — Another important service of banking is to assist in the production of needed goods and services by the making of loans. We have observed earlier that financial institutions act as middlemen, shifting funds from savers to borrowers (see Chapter XII). No institution shows this more clearly than the commercial bank. The surplus funds of every community are deposited, for the most part, in the commercial banks. These deposited funds, together with those supplied by the stockholders as capital, are loaned out or invested by the banks, thereby aiding in the production of goods to satisfy our wants. The mechanic's $100 deposit may find its way into the hands of a farmer who is borrowing to buy fertilizer.

The millionaire's $20,000 deposit may be loaned to a department store on Main Street Not that each deposit is separately loaned; but the final result is that borrowers in the

Courtesy Continental Illinois Bank and Trust Co.

INTERIOR ARRANGEMENT OF A BANK

Loans are arranged by conferring with the proper official of the bank. To make it easy to approach the proper official, banks usually place the officers' desks in the main banking room. This bank places them in an "island" in the center of the room. The tellers' windows are at the sides of the room.

community obtain the surplus funds of savers in the community.

Banks handle this business, of course, to make profits for their owners. To make profits banks must have more income than expenses. Their chief source of income is inter-

est collected on the loans they make; hence the making of safe and profitable loans is the very *essence* of commercial banking.

To whom is the money loaned? While different bankers would answer this question differently, it may be said that in general the money is loaned to those who can convince the banker that the money will be repaid. There are two classes in society that are especially successful in so convincing the bankers: (1) business firms whose operations are yielding profits; (2) individuals and firms who have good security to offer.

Business firms that are making profits seem to the banker to be a desirable outlet for bank funds, inasmuch as the profits testify to the prosperity and financial soundness of the firm; hence, the loan seems safe. The profits made are evidence to the banker that the firm can use borrowed money and make the money work successfully.

Loans to business firms are usually made on the simple promissory note of the officers or members of the firm, without the requirement of a pledge of specific property as security for the loan. Accordingly, such loans are known as "unsecured loans."

Individuals who have security to offer constitute the other principal class of borrowers from commercial banks. The chief forms of security offered are endorsements on the note, signed by persons in whom the bank has confidence; mortgages on real estate; warehouse receipts and bills of lading covering commodities in storage or in transit; and stocks and bonds.[1]

When an individual borrows on security, the banker is not so concerned about what use is to be made of the money

[1] The nature and use of these instruments are shown in Chapters IX, X, and XI.

as he is when the loan is unsecured. Many secured loans are made for nonbusiness purposes, such as buying a pleasure car, paying a hospital bill, or making a trip to Florida. Since the banker holds security for these loans, he does not worry concerning repayment. But unsecured loans are different. Their repayment may depend upon how the money is used, so the banker usually sees to it that unsecured loans are used productively, that is, in ways that will bring the funds back.[1]

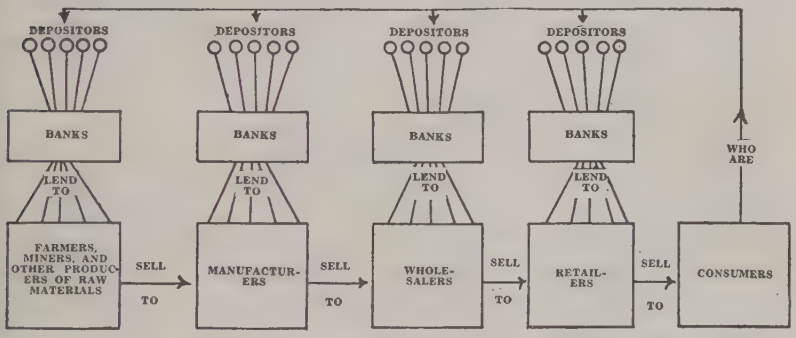
Loans and deposits depend on each other. — As the deposits of a bank increase, its loans also increase, since it has more funds to lend. For this reason banks are eager to gain additional deposits. In this sense loans may be said to follow and depend upon deposits.

But the process also works in the reverse direction. Deposits follow, and result from, loans. In transaction 3 on page 343 we found a borrower asking that the proceeds of his loan be placed to his credit on his deposit account. His deposit resulted from his loan. Just what proportion of the total deposits in all commercial banks are deposits of savers and what proportion are deposits of borrowers, we have no

[1] A real problem arises when a person urgently needs money (as when he is out of work) and has nothing to offer as security. If he can get some responsible person to "go on his note," that is, sign the note for him, he may be able to borrow at a commercial bank. But if he has neither security of his own, nor a friend to go on his note, he probably cannot borrow at commercial banks. For such cases other institutions have sprung up, among the more important of which are: (*a*) *pawnshops*, where personal property such as jewelry may be pledged to obtain loans; (*b*) *"loansharks,"* who lend either on personal property left in the home (such as furniture), or on wages to be earned in the future. Both of these institutions charge exorbitant rates of interest unless carefully controlled by society; (*c*) *industrial*, or *Morris Plan*, *banks*, which lend at reasonable rates to any one who can get several property owners to sign the note with him, the borrower paying off the loan in weekly instalments; (*d*) *remedial loan associations* (various other titles are used for these institutions), which aim to curb the "loansharks," and in some cases the pawnshops by lending to needy persons at moderate rates of interest.

way of knowing. We know, however, that an increase in savers' deposits usually results in an increase in loans; and that an increase in loans results in an increase in borrowers' deposits. By this method, loans and deposits increase together; each depends to some extent on the other.

The accompanying figure gives a picture of the place banks occupy in our economic system. It suggests that banks receive funds from depositors, lend those funds to business



THE PLACE OF BANKS IN OUR ECONOMIC SYSTEM

enterprises which are sending a stream of goods to consumers, and that these consumers are the depositors in banks.

Several aspects of the system are not shown in the chart. For example, the fact that business concerns themselves are important depositors is not shown. Neither is the fact that banks lend some of their funds to other types of enterprises, such as building construction, shipping, and dealing in stocks and bonds. Then, too, the chart suggests that consumers are a class apart from farmers, manufacturers, and others engaged in business, whereas consumers are, for the most part, also producers working in farming, manufacturing, and other enterprises. The chart is meant to show merely the position of commercial banks as middlemen connecting the savers

and the users of funds, and to suggest that banks assist in the great task of supplying needed goods to society.

Other services of commercial banks. — In addition to the major activities of handling deposits and loans, commercial banks perform certain minor activities which prove to be convenient to the public.

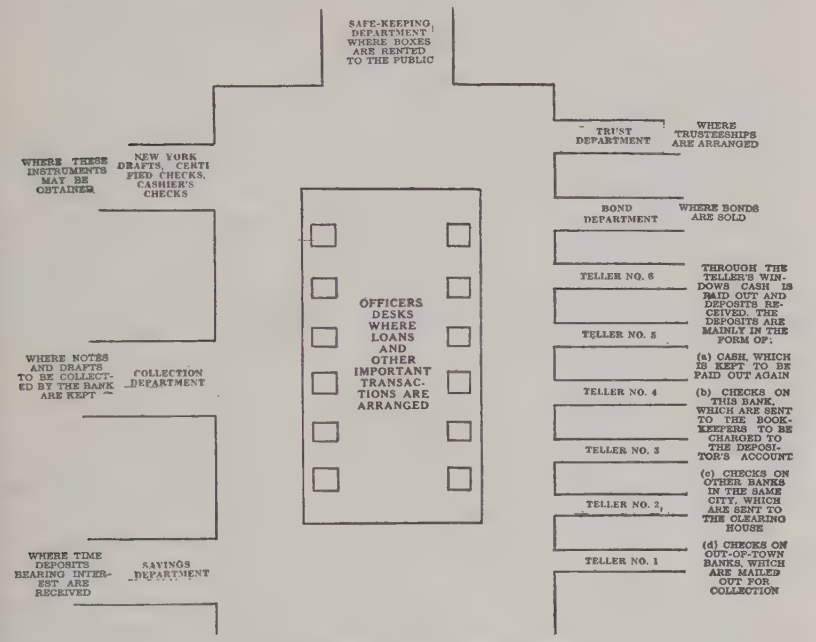
Banks provide for the transfer of funds. — As already noted, a customer who desires to transfer funds to a person or firm in any other city may apply at his bank for a draft. Even speedier than drafts sent through the mails is the system of telegraphic transfers now available through the Federal reserve banks (see page 381). Cable transfers provide a similar quick service to foreign countries.

Banks act as collecting agencies for their customers. — Individuals and business firms usually deposit with their banks all checks, promissory notes, drafts, bond coupons, and money orders of all kinds for collection. The banks of the country, and to some extent, of the world, work smoothly and speedily to collect these items.

Banks give advice and counsel. — Commercial bankers are specialists in money matters. Most of them are competent to give financial advice. In some cases customers seek this advice from the banker. In other cases the banker offers the advice to customers, especially to borrowing customers who are not conducting their financial affairs wisely. Through counsel and advice, bankers are helping to promote better business methods throughout society.

Commercial banks are tending to expand the scope of their operations. — Practically no commercial bank confines its activities to commercial banking. In order to increase its own profits and to serve its customers more effectively, it operates other departments. A savings department, receiving and paying interest on savings accounts (time deposits),

is almost always found. So is a safe-keeping department, which rents boxes for the storage of valuables in " burglar-proof " steel vaults. Since the bank must have a strong vault for its own valuables, it finds that a profit can be made by


SAFE-KEEPING DEPARTMENT WHERE BOXES ARE RENTED TO THE PUBLIC
TRUST DEPARTMENT
WHERE TRUSTEESHIPS ARE ARRANGED
WHERE THESE INSTRUMENTS MAY BE OBTAINED
NEW YORK DRAFTS, CERTIFIED CHECKS, CASHIER'S CHECKS
BOND DEPARTMENT
WHERE BONDS ARE SOLD
OFFICERS DESKS WHERE LOANS AND OTHER IMPORTANT TRANSACTIONS ARE ARRANGED
TELLER NO. 6
THROUGH THE TELLER'S WINDOWS CASH IS PAID OUT AND DEPOSITS RECEIVED. THE DEPOSITS ARE MAINLY IN THE FORM OF:
TELLER NO. 5
(a) CASH, WHICH IS KEPT TO BE PAID OUT AGAIN
WHERE NOTES AND DRAFTS TO BE COLLECTED BY THE BANK ARE KEPT
COLLECTION DEPARTMENT
TELLER NO. 4
(b) CHECKS ON THIS BANK, WHICH ARE SENT TO THE BOOKKEEPERS TO BE CHARGED TO THE DEPOSITOR'S ACCOUNT
TELLER NO. 3
(c) CHECKS ON OTHER BANKS IN THE SAME CITY, WHICH ARE SENT TO THE CLEARING HOUSE
TELLER NO. 2
WHERE TIME DEPOSITS BEARING INTEREST ARE RECEIVED
SAVINGS DEPARTMENT
(d) CHECKS ON OUT-OF-TOWN BANKS, WHICH ARE MAILED OUT FOR COLLECTION
TELLER NO. 1

What Goes on Inside a Bank

installing a somewhat larger vault and renting space therein (see picture, page 219).

In recent years a pronounced tendency has developed for commercial banks to add a trust department, performing the operations of a trust company (see Chapter XVII). This development has been forced upon the banks by the competition of the regular trust companies which have invaded the field of banking As pointed out earlier (page 302), the law in most states permits trust companies to do a regular

banking business. As trust companies have expanded into the banking field, offering so many services under one roof, the banks in self-defense have added trust departments.

In addition to these activities, some banks, especially the larger ones, have established a bond department which keeps on hand a supply of good bonds for sale to customers (see page 279). It is now possible, in some banks, for a person to obtain almost every kind of financial service, including a savings account, a checking account, a bank loan, a real-estate-mortgage loan, a bank draft, a telegraphic transfer of funds, the collection of his credit instruments, advice concerning investments, good bonds, the placing of his property in trust, the making of a will, and the storage of all his documents in safe-keeping. Department-store banking is convenient for the customer and profitable to the bank.

QUESTIONS

1. When people speak of banking, why is it they usually have in mind commercial banking rather than savings banking or investment banking?

2. Does it take any more ability and training to run successfully a commercial bank than it takes to run a bond house? an insurance company? Why?

3. How do you explain the fact that practically every small town has a commercial bank, but that one has to go to a fair-sized city to find a trust company and to a large city to find a bond house?

4. Why should a bank's note (bank paper money) circulate freely through the community, whereas the note of Mr. A, well-known business man, will not circulate?

5. What are the similarities and the differences between a bank note and a bank deposit?

6. If a bank has to invest $100 cash to get the government bond and in addition place $5 cash in the redemption fund, thus tying up $105 in order to receive $100 of bank notes to put into circulation, how does the bank figure that it pays to issue notes?

7. Suppose a bank ties up $105 of its cash in order to issue $100 of notes, and suppose that it receives $2 per year interest on the bond and uses the

$100 of notes to satisfy a borrower who wishes to borrow $100 for a year at 6 per cent interest. On these assumptions how much is the bank making on its investment?

8. Ask some of the bankers in your town why their particular bank was started as a national or as a state bank. Find out if any are considering changing from one to the other, and if so, why?

9. Are private banks permitted in your state? Why should not banking be as free from strict regulation as farming or storekeeping?

10. The national law makes the minimum capital required of national banks depend on the size of the city in which the bank is located; some states make the bank's required capital depend on the amount of deposits the bank has; the larger the deposits, the larger capital required. Which seems to you the better plan? Why?

11. Banking laws generally provide that in case a bank fails, the stockholders may be assessed and compelled to pay in cash an amount equal to the par value of their stock, in order to pay off depositors and others having claims against the failed bank. On what grounds can such a law be defended?

12. It is usually said that the character of a bank's loans is the crucial test of the bank. So important is it that the loans be carefully selected that a committee of officers or directors usually passes on the applications for large amounts. Why does the success or failure of a bank depend on the kind of loans it makes?

13. Why do bank examiners always look carefully to see whether a bank has made heavy loans to its own officers, directors, or businesses in which these men are heavily interested?

14. Why should a bank diversify its loans by lending to many different businesses in the local community and placing some of its loans in other communities? How can a country bank place some of its loans in distant places?

15. A real-estate operator, laying out a new suburb, needs $40,000 for surveying, plotting, laying off streets, setting out trees, etc. He applies to a bank. One man on the loan committee argues that the loan should be granted because a mortgage on the real estate will protect the bank in case the plans of the real-estate operator fail. Another member of the loan committee argues that the loan should not be granted because the bank would be tying up its funds for several years, inasmuch as the loan could not be repaid until the lots were sold and the money collected; this would be dangerous, he argues, because depositors may call on the bank for their

money at any moment, hence the bank should keep the depositors' funds placed out in short-time loans. How would you vote? Justify your position.

16. It is said that the Ford Motor Company never borrows from banks; the business produces sufficient cash to pay all bills when due. How can Ford do this? Why do not all firms do it? If all firms did do it, what would happen to the banks?

17. Arrange the following items under their proper heading — "resources" or "liabilities" (the two sides will balance if the work is properly done): Capital Stock, $200,000; Undivided Profits, $70,000; Bank Building, Furniture and Fixtures, $86,000; Cash in Vault, $18,600; Cashier's Checks Outstanding, $12,800; Acceptances Outstanding, $47,200; Certified Checks Outstanding, $2,400; Loans and Discounts, $872,000; Customers' Liability on Account of Acceptances, $47,200; Deposits Subject to Check, $921,500; Time Deposits, $72,000; Surplus, $100,000; Stock in Federal Reserve Bank, $9,000; Bonds and Other Securities, $160,000; Unearned Discount and Interest, $6,200; Overdrafts, $800; Due from Banks, $129,600; Reserve in Federal Reserve Bank, $112,200; Circulating Notes Outstanding, $60,000; 5 per cent Redemption Fund, $3,000; Exchanges for Clearing House, $53,700.

18. Take the statement you have made in Question 17 and show which items would be affected and whether those items would be increased or decreased by the following transactions (Use + and − signs, as in the chapter explanation; after each transaction the statement should again be in balance):

(*a*) Depositors bring in cash, $1,300; checks on out-of-town banks, $18,700; checks on banks in same city, $73,800; checks on this bank, $8,700.

(*b*) Customers get checks certified to the amount of $8,500.

(*c*) Cashier's checks are returned through the mail from the Federal reserve bank to the amount of $3,300.

(*d*) Mr. A discounts his noninterest-bearing promissory note, the face of which is $18,000, due in ninety days. The rate of discount is 6 per cent, and Mr. A wants the amount he is to receive put to his credit on his deposit account.

(*e*) The bank's New York correspondent is instructed to purchase certain bonds costing $12,800.

(*f*) Mr. A pays off his loan made in (*d*), at maturity by writing a check in favor of the bank.

(*g*) The directors declare a dividend of 4 per cent and pay the same by cashier's checks.

19. In Canada and in many European countries a bank is permitted to establish branch offices throughout the country. These branch offices do a regular banking business, but are owned and controlled by those in charge of the "parent" or main bank, which is located generally in the most important city of the country. Such a branch banking system eliminates almost entirely the necessity for correspondent banks. Why?

In some of our states, branch banking is permitted within the boundaries of the state. What advantage do you see in this plan (*a*) to the customers of the bank? (*b*) to the owners of the bank?

20. State a number of conditions which would cause the shipping of money from one place to another. Show how correspondent banks save trouble and expense in this connection.

21. At times the loans of city banks to their country correspondent banks are almost as large as the loans of the city banks to business firms. What does this indicate (*a*) regarding the need for capital in the country districts? and (*b*) regarding the necessity for correspondent banks?

22. Some states require by law every state-chartered bank to contribute to a guaranty fund. This fund is used to pay off depositors of failed banks, in case the resources of the failed banks are inadequate for that purpose. Many bankers oppose such a law on the ground that it compels the carefully managed banks to pay the losses of the carelessly managed banks. Explain what they mean. What arguments may be presented in favor of the law?

23. On the back of checks one frequently finds stamped, "Paid through the Clearing House." Just what does that mean?

24. Is a clearing house a labor-saving institution or is it a device to reduce undesirable competition between banks? Explain.

25. "Commercial bankers promote better business methods. This helps the banks, the business men, and the public-at-large." How?

26. Outline the services which commercial banks render to society. Could any of these be performed by any other financial institutions just as effectively?

TOPICS FOR FURTHER STUDY

1. Clearing Houses:

Moulton, *Financial Organization*, Revised Edition, pp. 438–451.
Dewey and Shugrue, *Banking and Credit*, chap. XXI.
Phillips, *Readings in Money and Banking*, chap. XIX.

Moulton, *Money and Banking*, Part II, pp. 102–113.
Magee, *Materials of Banking*, pp. 213–223.
Holdsworth, *Money and Banking*, Fifth Edition, chap. XV.
White, *Money and Banking*, pp. 216–231.

2. Relations between Correspondent Banks:

Moulton, *Financial Organization*, Revised Edition, pp. 451–457.
Magee, *Materials of Banking*, chap. VIII.
Moulton, *Money and Banking*, Part II, pp. 113–124.

3. Government Regulation of Banks:

Willis and Edwards, *Banking and Business*, chap. XIV.
Moulton, *Financial Organization*, Revised Edition, chap. XXIII.
Moulton, *Money and Banking*, Part II, pp. 197–224.
Magee, *Materials of Banking*, chaps. XIII, XIV.

4. Note Issues of National Banks:

Dewey and Shugrue, *Banking and Credit*, chap. XII.
Phillips, *Readings in Money and Banking*, pp. 682–695.
Moulton, *Money and Banking*, Part II, pp. 253–258.

5. Operations of the Commercial Bank:

Phillips, *Readings in Money and Banking*, chap. IX.
Moulton, *Financial Organization*, Revised Edition, chap. XVIII.
Moulton, *Money and Banking*, Part II, chap. IV.
Willis and Edwards, *Banking and Business*, chaps. V–XI.
Dewey and Shugrue, *Banking and Credit*, chaps. IX, XIII, XIV, XIX, XX.
Holdsworth, *Money and Banking*, chaps. XII, XIII, XIV, XVI.
White, *Money and Banking*, pp. 193–215.

CHAPTER XX

FEDERAL RESERVE BANKS

A. How the Federal Reserve System Remedies the Defects in the Old System

B. The Organization of the Federal Reserve System

Business, banking, and credit have developed together. — Commercial banking has developed with the development of business. So long as business was local, banking also was local. When business became sectional, banking became sectional; local banks had either to provide branch offices in other communities or to arrange with separate banks in other communities for the transfer of funds. Now that the scope of business has become national, indeed to an increasing extent international, banking has become national and international in scope. The production and distribution of commodities on a large scale means the raising, handling, and rehandling of large amounts of funds. This has brought about, not only large commercial banks, but also bond houses and trust companies. All financial institutions have grown in size, paralleling the growth of business enterprises.

With increasing size, both banking and business have come to be conducted, to a greater extent, on credit.[1] Goods are sold, payment to be made later. A manufacturer, for example, sells to a wholesaler on credit; the wholesaler sells to the retailer on credit; the retailer sells to the final consumer on

[1] See pages 79–86.

credit. When the consumer pays the retailer, the retailer can pay the wholesaler, and the wholesaler can pay the manufacturer. The commercial banks may be involved through loans to one or more of the parties (see figure, page 365). The banks, like the business firms, thereupon become dependent on payment by the final consumer. If failure to pay occurs anywhere along the line, the chain is broken and banks, as well as other firms, feel the effect. Furthermore, the growth of large banks and business firms means an increase in the number of customers, many of whom are strangers, and in the amount of credit business, and therefore in the risk of nonpayment.

Serious difficulties arose in the credit system, resulting in the Federal Reserve Act. — This system of credit has broken down, partially or completely, a number of times within the past half century. In 1873, following a period of prosperous business when credit was freely extended, certain important banks and business firms failed, bringing on a panic.[1] A partial breakdown occurred in 1884, while nine years later (1893) saw one of the severest panics the country ever suffered. Following another panic in 1907, Congress appointed a commission to study the problem and recommend legislation. The outcome was the Federal Reserve Act, passed in 1913. This law was not designed to cure all the evils connected with business and banking. Its primary purpose was to unite the banks into a more effective system so that some of the more serious evils, especially panics, could be prevented.

In brief, the Federal Reserve Act of 1913 created twelve new banks, known as Federal reserve banks, under the supervision

[1] A panic is a financial crisis in which stocks, bonds, and many commodities fall rapidly in price; many business firms fail because they are pressed to pay their debts and cannot raise the money, while the banks suffer "runs" in which they are called upon to pay out large sums of cash to frightened depositors. If the banks are short of cash, they, too, fail.

of a Federal Reserve Board. A Federal reserve bank was placed in each of twelve important cities, the idea being that the reserve bank would strengthen all the commercial banks in the region about that city, while the banks in turn would strengthen the credit and business system. In order to get the aid of the reserve bank, however, a commercial bank must become a member of the system (see page 341). Congress, since it had authority only over national banks, could require the national banks to join, but it could only invite the state banks to become members. Since membership involves some expense and requires high standards of banking practice, most of the state banks have thus far declined to join. However, the banks in the system represent close to two-thirds of the total resources of all the banks in the country [1] The reserve banks do business only with banks and with the United States government.

A. How the Federal Reserve System Remedies the Defects in the Old System

(Concentrates reserves; provides elastic currency; gives improved facilities for collection of items and for rediscounting; handles government funds; helps stabilize business)

The Reserve System is designed to correct the defects in the old banking system. — As already shown, in the growth of our credit system certain weaknesses developed. Our attempt to overcome these weaknesses has given us the Federal Reserve System. We may now examine, specifically, the principal weaknesses of the old system and the way in which the reserve system tries to correct those weaknesses.

[1] At the end of 1928 only 34 per cent of all the banks in the country were members of the reserve system, but these banks had 62 per cent of the nation's banking resources (*Federal Reserve Board Report for 1928*). Eliminating savings banks and private banks from the calculation, the member banks have about 75 per cent of the banking resources of the country.

1. *Under the old system cash reserves were not always available. Under the Federal Reserve System they are available.* — Before the Federal Reserve System was organized, each bank kept a part of its cash in its own vaults and part in correspondent banks. When a country bank, say in Scottdale, Pa., shipped $10,000 to its correspondent bank in Pittsburgh, the Scottdale bank counted the cash as part of its reserve, and when the Pittsburgh bank received the money, it also counted the $10,000 as part of its cash reserve. The same money was thus being counted twice. Indeed it frequently happened that the same cash was counted as reserve three times, for the Pittsburgh bank might send the $10,000 to its New York correspondent, there to be counted again as reserve money. The old national banking law permitted the national banks to do this, and indeed, in ordinary times, there was nothing about this practice to cause trouble. However, in time of panic or threatened panic, trouble resulted. The Scottdale bank would telegraph to its Pittsburgh correspondent for its reserve. The Pittsburgh bank would wire its New York correspondent for the money. The New York bank, having loaned the money out, might not be able to collect its loans promptly. Especially was it difficult to collect loans in time of threatened panic, for at such a time people tended to hoard their cash, fearing they would be caught short if they paid it to others. Accordingly, the New York banks had trouble in panic times collecting what was due. But even if the New York bank did succeed in collecting its loans, it might not be in a position to ship the $10,000 to the Pittsburgh bank. It would have so many calls for money from its own depositors in New York and from its many correspondent banks throughout the country that it might have to refuse the Pittsburgh bank's request. In that event the Pittsburgh bank might find itself in trouble, unable to

pay its own local depositors and unable to pay the Scottdale and other country bank correspondents. The Scottdale bank in turn would be embarrassed by lack of funds. The fundamental trouble was that three different banks were relying upon the same $10,000, although the money could not possibly be in three different places at the same time. The reserves, having been deposited in New York, were not available in time of need.

This trouble has been corrected under the Federal Reserve System by requiring all member banks to deposit a cash reserve in the Federal reserve bank of their district. (For the amount required see page 341.) The reserve bank does not lend out this money, but holds most of it in its vaults, so that in time of emergency the funds can be sent promptly to the member banks. Not only may a member bank withdraw its reserve in time of need, but it may, under certain conditions to be explained later, borrow additional funds from the reserve bank. A Federal reserve bank may therefore be likened to a reservoir into which hundreds of pipes open, each pipe connecting a member bank with the central reservoir. Money from the member banks flows through these hundreds of pipes to the reserve bank, there to be stored until needed. When needed, the money flows back to the particular bank or banks needing it. Since the reserve banks have as depositors only member banks and the government, they (the reserve banks) need not worry about individuals clamoring at the door for their money; they can devote all their energy to helping their member banks in time of stress.

2. *The paper money supply was inelastic. The reserve banks make it elastic.* — Another difficulty under the old banking system was that the banks ran short of cash in panic times because there was no method by which safe paper money could be quickly printed and placed in the banks to be used

as reserves. All forms of government issued money (gold and silver coins, gold and silver certificates, and "greenbacks") were either fixed in amount by law or could be increased only by the slow process of individuals presenting gold bullion to the mints. The national banks could not increase their own paper money (national bank notes) because they could not obtain the additional government bonds needed to secure additional notes. The supply of bonds for this purpose was limited.

Nor are panic times the only times when more money is needed. During the course of a single year the need varies. In midwinter business tends to be dull, causing less need for currency. In the spring, business becomes more active as farming, building construction, manufacturing, and trade pick up. At this season, more currency is needed to carry on the increased business. In midsummer a slackening occurs, followed by a season of great activity in the autumn. The demand for currency reaches its peak with the Christmas shopping season in December. Banks are therefore called upon to supply their customers with more currency at certain seasons of the year than at other seasons. Yet our banking system prior to 1913 made no provision whereby paper currency could be increased either in panic times or in certain seasons of the year. Our money supply was inelastic: it needed to be made elastic.

The Federal reserve banks now provide an elastic form of paper money — the *Federal reserve note* (see page 64). A supply of these notes is kept on hand in each reserve bank. Just as the customer of a bank applies to his bank when he gets short of cash, so a member bank applies to the Federal reserve bank when it gets short of cash. And just as the customer of a bank has two ways of getting cash from his bank, first by withdrawing in cash his deposits, and second

by borrowing from the bank, so the member bank has the same two ways of getting cash from the reserve bank, by withdrawing deposits and by borrowing. Thus additional paper money becomes available to replenish bank reserves when reserves run low. Through the banks it becomes available to the public as needed.

And the supply of paper money in circulation diminishes when it is no longer needed. Just as the individual usually deposits his surplus cash in his bank or pays off his loans with it — so a member bank does likewise. When more cash lodges in the bank than is needed, the bank may use it to pay off its loans to the reserve bank or to strengthen its deposit account with the reserve bank. Since there are more Federal reserve notes in circulation than any other kind of money (see page 66), a large proportion of the cash flowing back to the reserve banks is in the form of Federal reserve notes. Thus Federal reserve notes flow from the reservoir to the member banks when more cash is needed and back from the banks to the reservoir when the need has passed.

Since the government requires the Federal reserve banks to hold ample security in the form of gold back of each reserve note issued, the public does not need to worry regarding the safety of this paper money.[1]

3. *The collection of out-of-town checks was inefficient. The reserve banks have made it more efficient.* — Suppose a traveling man whose home is in Elgin, Illinois, needs money while in El Paso, Texas. He writes a check on his home bank in Elgin which we will call Bank A. He cashes this check at a bank in El Paso. Under the old system, the El Paso bank would have sent that check along with others to some correspondent bank, say, in Galveston, where its deposit balance was

[1] For fuller treatment of the security behind Federal reserve notes and the method of issuing and redeeming them, see Chap. IV, pp. 63–65.

running low, and in this way would have built up its balance. The check, therefore, would have traveled from El Paso to Galveston. The Galveston bank would have credited the account of the El Paso bank and sent the check to its correspondent in St. Louis, where it desired to build up its own balance. The St. Louis bank would have credited the Galveston bank and forwarded the check to its correspondent in Chicago and received credit there. The Chicago bank had a correspondent in Elgin, and the check would have journeyed to this correspondent, say Elgin Bank B, which would have presented it to Bank A on which it was drawn. Six banks would have performed clerical work on this check and it would have been "floating about" for several weeks. This inefficient and wasteful system still survives to some extent, but important improvements have been made by the Federal Reserve System.

Using the Federal Reserve System, the Elgin check gets home more speedily. The El Paso bank sends the check to the reserve bank at Dallas. The Dallas Reserve Bank forwards the check to the Chicago Reserve Bank, since Elgin is in the Chicago district. The third and final move of the check is from the Chicago Reserve Bank to Elgin Bank A. By means of this system time and expense are saved, both to the banks and to customers. The collection system of the reserve banks handles, not only checks, but other credit instruments as well, including promissory notes, drafts, acceptances, and bond coupons.

Another service, somewhat akin to the collection service just described, is performed by the reserve system, namely, the wire transfer of funds. Suppose Mr. Y, a cotton buyer of Troy, New York, is about to leave for the South to purchase cotton. He wants $15,000 placed in a bank in Savannah, Georgia, to enable him to pay cash for his cotton.

He places the $15,000 in his bank in Troy, with a request that it be transferred by wire to a certain bank in Savannah, then boards his train. The Troy bank notifies the reserve bank of its district, at New York. The New York Reserve Bank wires the reserve bank at Atlanta; the reserve bank at Atlanta notifies the Savannah bank that Mr. Y is authorized to withdraw $15,000. The Savannah bank is ready for Mr. Y before he arrives. The Troy bank settles with the reserve bank of New York, which settles with the Atlanta Reserve Bank. Settlement consists simply in making entries on the books, since these banks carry accounts with one another. These wire transfers are made without expense to customers. Thus a quick and economical method of transferring funds from place to place is provided by the reserve system.

4. *There were no facilities for rediscounting. The reserve banks provide such facilities.* — As previously noted, in times of cash shortage a bank usually withdraws part or all of its deposits in correspondent banks and may be forced, in addition, to borrow from other banks.[1] Prior to the Federal Reserve Act, such borrowing had to be done from correspondent banks, which might, or might not, be in a position to lend. If a loan was arranged, it was usually by means of a promissory note signed by the officers of the borrowing bank and secured by collateral in the form of customers' notes owned by the bank. The customers' notes themselves were not salable, chiefly because the correspondent bank had no way of judging the soundness of such notes. Accordingly, under the old system a note discounted by a bank could not be rediscounted, that is, sold again.

The reserve banks stand ready not only to lend to a member

[1] In addition, if the bank owns some marketable bonds, cash may be obtained by selling them.

bank on a promissory note signed by the officers and secured by good collateral, but also to rediscount certain kinds of notes owned by a member bank. For example, Jones applies to the First National Bank of Kokomo for a loan of $10,000 with which to buy goods for his store. He fills out a blank, giving a complete statement of his assets and liabilities, the profits of his store, and other credit information. The Kokomo bank discounts his note, giving him $10,000 less the amount of discount. In case the Kokomo bank needs cash it may ask the Federal reserve bank of Chicago to rediscount Jones's note. The reserve bank requests the blank giving the credit information about Jones, and examines Jones's note to see whether, under the law, it is " eligible " for rediscount.[1] If the conditions are satisfactory to the reserve authorities, the reserve bank rediscounts Jones's note, paying the Kokomo bank $10,000 less the amount of the rediscount. The rediscount is figured, like the discount, for the time the note has to run to maturity and at the rate of rediscount prevailing at the reserve bank.

In order to strengthen any reserve bank whose cash reserves may be running low, the law provides that one reserve bank may lend to another reserve bank. If the Chicago Reserve Bank, when rediscounting Jones's note, had so many calls for loans and rediscounts that its own cash reserves were drawn

[1] To be "eligible" for rediscount a note or draft must meet the following qualifications:

1. The original loan, which gave rise to the paper, must have been made for an industrial, commercial, or agricultural transaction.

2. The paper must mature within ninety days after it is offered for rediscount, except agricultural paper, some kinds of which may have six months yet to run and some may have nine months until maturity.

3. It must be indorsed by a member bank.

Bankers' acceptances may also be sold to the Federal reserve bank, provided they are indorsed by a member bank, have ninety days or less to run, and arise out of a commercial transaction.

below the legally established limit,[1] it could borrow from one or more of the other twelve reserve banks. This means that the twelve central reservoirs are connected with one another as well as with their member banks. So long as funds are available in any one part of the United States, they may be made available in any other part. The reserve system pools the cash resources of the country. It helps to give us a nation-wide banking system.

5. *There was no control of credit in periods of prosperity. The reserve banks may exercise control.* — Business conditions govern, very largely, the demands made upon banks. When business is dull, banks have fewer calls for loans; when business is prosperous, bank loans increase. Dull business means relatively low prices of goods, weak demand for goods, much unemployment, small profits or actual losses in operation of business firms, a small amount of borrowing from banks, and consequently low interest rates. Such a period of business depression is followed, sooner or later, by more prosperous conditions. Demand for goods increases, carrying prices of commodities upward; as production expands, more workers are employed, while interest rates rise as banks are called upon for more loans to help firms take care of their increasing volume of business. It is these periods of prosperous conditions that are dangerous because they threaten to go too far. There is always danger that merchants will buy more goods than they can sell; that manufacturers will produce more than the markets will absorb; that miners will dig more minerals than the public will buy; that farmers will buy high-priced land only to find they cannot make it pay; that speculators will store up sugar, wheat, cotton,

[1] The law requires each reserve bank to carry in gold a reserve of 40 per cent of the amount of its Federal reserve notes in circulation and 35 per cent of its deposits of member banks.

coffee, and other products, expecting to unload them later at higher prices; and that all these groups (merchants, manufacturers, miners, farmers, speculators) will borrow heavily during prosperity, only to find they cannot pay their debts because depression sets in. If all the bankers had stood together, had warned the business classes against the dangers of prosperity, and had even gone so far as to refuse loans when prosperity became threatening, they would have rendered a great service to society. But each banker felt that he would offend and drive away customers if he gave warnings and refused loans. Hence practically nothing was done.

To-day, the majority of the large banks of the country are members of the reserve system and count on getting funds from the reserve banks in time of need. By raising the interest rate charged on loans to member banks, the reserve banks can make it expensive for the member banks to borrow. This in turn may cause the member banks to raise their rates to the public, making it expensive for the public to borrow, and possibly putting a stop to many projects that would result disastrously if carried out. At the same time the reserve banks can issue warnings to the business world as well as to their member banks regarding the dangers of going too far with prosperity. Since the reserve banks have so much power over the money and banking system of the country, their warnings are likely to be heeded. While fluctuations in the business world will doubtless be experienced in the future as in the past, we have reason to believe that the Federal Reserve System will make such fluctuations less extreme and less disastrous.

6. *Some government funds were not kept in banks. The reserve banks now hold government funds.* — In 1846 the United States government established a main treasury in Washington and subtreasuries in certain leading cities. All

federal government funds were deposited in these treasuries. At this time the banks in most states were unsafe, and since no national banks existed, the government felt obliged to lock up its funds in its own treasuries. After the establishment of national banks in 1863, it became apparent that there were safe as well as unsafe banks. Gradually some federal funds came to be deposited in national banks, but most of the government's cash was still kept in the independent treasury system. One difficulty with this arrangement was that it tended to withdraw from use the funds which were in the hands of the government. If all this money had been deposited in banks, it would have remained at work. With the establishment of the reserve banks, the government has discontinued all except the main treasury at Washington, and practically all federal funds are now deposited in banks, most of the funds being in the twelve reserve banks.

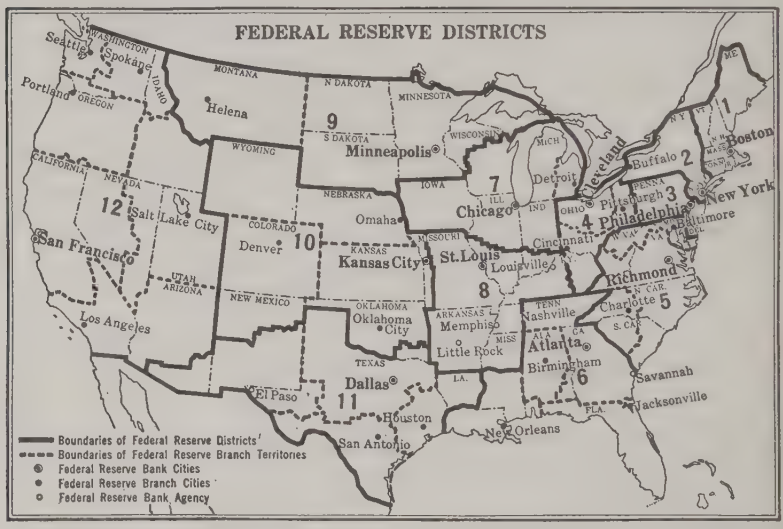
In addition to acting as depository for government funds, the reserve banks perform other services for the United States government, including the making of loans to the government and acting as fiscal agent for the payment of interest and principal on government bonds.

B. The Organization of the Federal Reserve System

(Location, capital, and deposits of the reserve banks; selection of directors; coördination of the twelve banks)

When Congress created the Federal Reserve System, a number of perplexing problems presented themselves: How many reserve banks should be established? Where should they be placed? How was capital to be obtained for them? How should they be permitted to invest their funds? How was each reserve bank to be governed, and how was the system as a whole to be coördinated? These were some of the difficult questions to be worked out.

The reserve banks were located in twelve leading cities. — In order to bring reserve bank facilities close to member banks in every part of the country, the act provided that the country should be divided into districts and a reserve bank placed in a leading city in each district. Twelve districts were created.[1] The law also authorized the Federal reserve bank in



each district to operate branches in selected leading cities of the district. The branch brings the facilities of the reserve bank still closer to certain member banks. The accompanying map shows the boundaries of the districts, the city in which the reserve bank is found, and the cities in which branches have been opened.

[1] Each reserve bank has been given a distinctive serial number and letter. The Federal reserve bank of Boston is 1–A; the Federal reserve bank of New York is 2–B; and so on, to 12–L for the Federal reserve bank of San Francisco. Each Federal reserve note in circulation bears on its face a circular seal giving the serial number and letter as well as the name of the reserve bank which issued it.

Member banks supply the capital and most of the deposits of the reserve banks. — In order that the reserve banks may be owned by the member banks, each member bank is required to buy a certain amount of capital stock of the reserve bank of the district (see page 341). The member bank receives, as returns on this investment, 6 per cent dividends annually.

Deposits are made in the reserve banks by the government and by member banks, chiefly by the latter. All member banks are required to deposit a certain sum in the reserve bank of their district (see page 341). The accompanying table shows, in round numbers, the capital and deposits of each reserve bank on April 24, 1929. From these figures one can gain some idea of the comparative financial size of the twelve banks.

CAPITAL AND DEPOSITS OF THE TWELVE RESERVE BANKS, APRIL 24, 1929
(In thousands of dollars)

	Capital	*Deposits*
Reserve bank of Boston	$10,306	$146,495
Reserve bank of New York	55,821	924,674
Reserve bank of Philadelphia	15,133	137,836
Reserve bank of Cleveland	15,076	181,124
Reserve bank of Richmond	6,176	69,163
Reserve bank of Atlanta	5,331	66,668
Reserve bank of Chicago	19,471	347,266
Reserve bank of St. Louis	5,424	82,185
Reserve bank of Minneapolis	3,089	54,299
Reserve bank of Kansas City	4,293	91,178
Reserve bank of Dallas	4,476	69,205
Reserve bank of San Francisco	11,255	179,991
Total	$155,851	$2,350,084

Reserve banks may use their funds for certain purposes only. — How shall the capital and deposits of the reserve banks be used? Since the reserve banks are designed primarily to aid member banks in time of emergency, they must be careful to keep an ample supply of funds on hand at all times.

In other words, a large part of their funds must not be invested at all, and the part that is invested must be invested in such a form that the funds can be quickly recovered. Accordingly, after laying aside the required reserves (see note, page 383), the reserve banks may use their funds to make loans to member banks and to make investments in United States government bonds and in bankers' acceptances (see page 198). The income from these loans and investments is used to pay the running expenses of the reserve banks and the dividends on their capital stock. Any amount remaining is added to the surplus of the reserve bank.[1]

The directors are chosen by the member banks and the Federal Reserve Board. — The most important questions that arise in a corporation are referred to the board of directors for settlement. It may be said, therefore, that whoever selects the directors of an enterprise controls that enterprise. In an ordinary bank or other business corporation the general rule is that the stockholders elect the directors, each stockholder casting as many votes as he holds shares. If this rule applied to the reserve banks it would mean that the large member banks (since they are the largest stockholders) would dominate the reserve banks by electing a majority of the directors. Congress thought this ought not to occur, since the reserve system was created to serve the entire people — small banks, large banks, customers of banks, noncustomers of banks, everybody, including the government itself. Congress therefore decided to create a special rule for the selection of reserve-bank directors. It provided for nine directors for each reserve bank, and ordered that the nine should be composed of three class-A, three class-B, and three

[1] The law provides that in case the surplus accumulates to an amount equal to the subscribed capital of the reserve bank, 90 per cent of the net earnings thereafter shall go to the government and 10 per cent shall be added to surplus.

class-C directors. The three class-C directors are chosen by the Federal Reserve Board at Washington, to represent the government. The other six directors, of classes A and B, are chosen by the member banks of the district, by a method of voting which allows the large banks to select two of the six directors, the medium-sized banks two, and the small banks two. In each pair selected, one is a banker, and one is a business man or farmer representing the customers of the banks.

The reserve banks are coördinated mainly through the Federal Reserve Board. — In order to knit the twelve reserve banks into a unified system and to provide supervision of the system, the Federal Reserve Board exists at Washington. This board, aiming to prevent, as far as possible, panics, extreme depressions, and "runaway prosperity," among its other duties, studies business conditions throughout the country; it arranges for one reserve bank to come to the assistance of another in case one runs short of funds; it manages a "gold-settlement fund" at its own headquarters in Washington, whereby transactions among the twelve reserve banks are settled; and it examines the condition of the reserve banks from time to time. The board, sitting at the capital of the nation, is not concerned with the details of banking but watches the broad movements of business and tries to adjust banking to the needs of business.

The Federal Reserve Board is now composed of eight members, appointed by the President of the United States.[1] The expenses of maintaining the board are paid by the twelve reserve banks.

[1] The Secretary of the Treasury, a member of the President's cabinet, is chairman of the Federal Reserve Board. The Comptroller of the Currency, who has general supervision of the national banks, is another member. Of the other six members, one must be a farmer and two must be experienced bankers.

Summary. — A convenient way to summarize the work of the Federal reserve banks is to list the chief activities of a reserve bank. The accompanying statement gives a picture of the work done by the largest of the twelve banks in 1928. This bank with its Buffalo branch employed 2,429 persons on December 31 of that year.

PRINCIPAL OPERATIONS OF THE RESERVE BANK OF NEW YORK, 1928

	1928
Supplying Currency and Coin	
CURRENCY PAID OUT, RECEIVED, OR REDEEMED	
Individual notes counted	666,298,000
Dollar amount paid and received	$8,866,402,000
COIN PAID OUT OR RECEIVED, a service previously performed largely by the Subtreasury, but now entirely in the hands of the Federal reserve banks.	
Individual coins received	1,341,373,000
Tons of coin received during year	7,352
CURRENCY AND COIN SHIPMENTS, number of shipments to and from out-of-town banks during the year	303,160
Making Loans and Investments	
BILLS DISCOUNTED FOR MEMBER BANKS, either discounted customers' paper or advances against the notes of member banks secured by collateral in the form of government securities or commercial or agricultural paper.	
Number of bills discounted	38,056
Dollar amount	$24,791,838,000
ACCEPTANCES AND GOVERNMENT OBLIGATIONS purchased for the account of this bank and other Federal reserve banks.	
Dollar amount	$6,445,726,000
Collecting Checks, Drafts, Notes, and Coupons	
CASH ITEMS, mostly checks, handled for collection for banks in all parts of the country.	
Number of items	177,349,000
Dollar amount	$115,190,618,000
NONCASH ITEMS, handled for collection, including drafts, notes, and coupons.	
Number of items	2,615,000
Dollar amount	$2,803,037,000
Supplementary Services	
SECURITIES HELD in safekeeping for the United States Government, the War Finance Corporation, and others.	
Average dollar amount	$1,142,075,000
ACCEPTANCES AND OTHER SECURITIES BOUGHT OR SOLD for member banks, and foreign banks.	
Dollar amount	$1,931,081,000

FUNDS TRANSFERRED BY TELEGRAPH to and from all parts of the country for the Treasury Department and member banks.	
Number of transfers	402,000
Dollar amount	$55,469,947,000
Services in Connection with Government Loans	
UNITED STATES GOVERNMENT SECURITIES issued, redeemed, or exchanged, including Government bonds, notes, and certificates of indebtedness.	
Number of items	1,504,000
Dollar amount	$3,985,049,000
COUPONS PAID ON GOVERNMENT SECURITIES.	
Number of coupons	7,602,000
Dollar amount	$250,025,000

QUESTIONS

1. What do the following terms mean:

(*a*) Member bank? (*e*) Rediscounting?
(*b*) Class-C director? (*f*) Wire transfer?
(*c*) Panic? (*g*) Independent treasury system?
(*d*) Reserve District No. 9? (*h*) Federal reserve note?

2. What are the advantages to a bank of being a member of the Federal Reserve System? Can you suggest any disadvantages?

3. Many state banks could not join the Federal Reserve System if they wanted to, because they are unable to meet the requirements for membership. Many other state banks could join but do not, some of their reasons being:

(*a*) Bank examinations and other requirements under the Federal Reserve System are stricter and more searching than those under state law.

(*b*) Their correspondent banks in New York and Chicago will do for them everything that a reserve bank will do for its members.

What are these things that reserve banks do for their members, which the nonmember banks claim are done for them by their New York and Chicago correspondents? Do you think the nonmember banks have *all* the advantages that member banks have? Give reasons for your answer.

4. An ordinary bank tries to make as much profit as possible for its stockholders. Does a Federal reserve bank try to do the same thing? Give reasons for your answer.

5. Might a reserve bank fail to make even its running expenses for several years and still be considered a success? Why?

6. Why is more money used at certain times than at other times? Show what effect the Christmas season has on the supply of cash in the banks. Show how the reserve banks are brought into play at such times.

7. "If depositors are afraid they cannot get their money, they are sure to start a run on the bank; if they are confident they can get their money, they do not want it, and there will be no run on banks." Prove that the Federal Reserve System helps prevent "runs."

8. "The Federal Reserve System was created to help the government, to help the banks of the country, and to help the general public." Show how it helps each of these.

9. "That reserve bank that we visited was the quietest bank I ever saw. There was nobody around except the employees. They all seemed to be busy, but there weren't any customers in the place. I don't understand it." Can you explain it?

10. (*a*) How do you suppose the mail and express matter in and out of a reserve bank compares with that of an ordinary bank?

(*b*) How do you suppose the amount of cash in a reserve bank compares with that of a large member bank? Give reasons.

11. "The old method of collecting out-of-town checks was wasteful, slow, and cumbersome. And the public ultimately paid for it, as the public does for all wasteful methods of doing business. The Federal Reserve System saves the public millions annually by its collection system." Wherein was the old system wasteful? How does the Federal Reserve System improve conditions?

12. Give an original example calling for a wire transfer of funds. How does this service benefit the public?

13. Show that rediscounting is a method by which a member bank may get a supply of Federal reserve notes from the reserve bank.

14. When a rediscounted note falls due, the reserve bank sends it for collection to the member bank that rediscounted it. The member bank collects from the signer of the note and remits to the reserve bank. Show that this process may result in Federal reserve notes being withdrawn from circulation.

15. Wherein was it a reform to close the government subtreasuries and transfer the government funds to the reserve banks?

16. How can prosperity be dangerous? Why did the old banking system do nothing to prevent prosperity from "running away"? How can the reserve system prevent trouble of this kind?

17. In which reserve district do you live? Where is the reserve bank of your district? Is the local bank with which you or your parents deal, a member of the Federal Reserve System?

18. The statistical staffs of the various reserve banks gather much data

on business conditions in their respective districts, which are published in a monthly bulletin issued by the bank. In addition the Federal Reserve Board at Washington publishes an elaborate bulletin on important business and financial conditions here and abroad. If the reserve banks are to exercise important powers of control over credit, are such reports necessary? Why?

19. Summarize what you regard as the most significant services the Federal Reserve System offers the American people.

TOPICS FOR FURTHER STUDY

1. Organization of Federal Reserve System:
   Moulton, *Financial Organization*, Revised Edition, pp. 550–55.
   Willis and Edwards, *Banking and Business*, Revised Edition, chap. XXVI.
   Dewey and Shugrue, *Banking and Credit*, chap. XXIII.
   Magee, *Materials of Banking*, pp. 582–84.
   Moulton, *Money and Banking*, Part II, pp. 259–82.
   Phillips, *Readings in Money and Banking*, pp. 730–35.
   Holdsworth, *Money and Banking*, Fifth Edition, Chap. XXII.

2. Rediscounting by Federal Reserve Banks:
   Dewey and Shugrue, *Banking and Credit*, chap. XXIV.
   Phillips, *Readings in Money and Banking*, pp. 744–49.
   Moulton, *Money and Banking*, Part II, pp. 300–18.
   Moulton, *Financial Organization*, Revised Edition, pp. 566–78.
   Holdsworth, *Money and Banking*, Fifth Edition, pp. 482–87.

3. Issue of Federal Reserve Currency:
   Magee, *Materials of Banking*, pp. 559–62; 572–76.
   Moulton, *Financial Organization*, Revised Edition, pp. 555–66.
   Phillips, *Readings in Money and Banking*, pp. 763–73.
   Moulton, *Money and Banking*, Part II, pp. 283–99.
   Holdsworth, *Money and Banking*, pp. 364–71.

4. Clearing Checks under the Federal Reserve System:
   Magee, *Materials of Banking*, pp. 562–66, 585–605.
   Moulton, *Financial Organization*, Revised Edition, pp. 585–91.
   Holdsworth, *Money and Banking*, Fifth Edition, pp. 524–37.

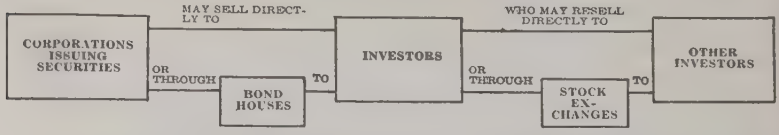
5. The Federal Reserve Board:
   Magee, *Materials of Banking*, pp. 501–03; 520–26.

CHAPTER XXI

STOCK EXCHANGES AND THE MONEY MARKET

A. How Stock Exchanges Operate
B. Services of Stock Exchanges
C. The Operation of the Money Market
D. Reporting the Financial News

The place of the stock exchange in our society. — Practically all of the financial institutions discussed in the preceding chapters deal directly with firms seeking funds. Banks, trust companies, and bond houses, for example, supply capital directly to businesses in need of funds. The stock exchange, however, does not do this. Rather, the stock exchange is a market place where stocks and bonds, already outstanding, may change hands. It affords the means whereby those who have already supplied businesses with capital and are holding stocks or bonds as evidence thereof, may sell their stocks or bonds to others. Whereas bond houses exist for the purpose of distributing stocks and bonds from the issuing corporations to the investing public (see Chapter XVI), stock exchanges exist to redistribute these securities among investors. The place of stock exchanges in the general scheme of distributing securities may be shown as follows: [1]



The Place of Stock Exchanges in the Distribution of Securities

[1] The figure is not intended to show *all* of the ways by which securities may pass into the hands of investors. Nor is it intended to suggest that the redis-

A. How Stock Exchanges Operate

(Investment and speculative operations; rules for trading)

A stock exchange is an organization of individuals, known as members, formed to conduct trade in stocks and bonds under definite rules. This trade is conducted during certain hours of the day in a room especially adapted to the purpose. A stock exchange is found in each of the more important cities of the country. The exchanges outside of New York City, however, exist mainly to provide a market place for securities of local concerns only. The transactions on the Cleveland Stock Exchange, for example, are mostly in securities of companies that have their headquarters in Cleveland; the members of the Detroit Stock Exchange trade mainly in the stocks

The New York Stock Exchange

tribution of securities is the only purpose served by stock exchanges. It is intended merely to show the field occupied by stock exchanges in distributing securities.

© *New York Stock Exchange*

TRADING FLOOR OF THE NEW YORK STOCK EXCHANGE (see footnote on opposite page)

and bonds of Detroit concerns. But the New York Stock Exchange is of national importance, indeed of international importance, for on its floor trading occurs in the securities of corporations and governments operating all over the world. The majority of our large corporations have their headquarters in New York City. Our largest banks and bond houses are there. It is, in reality, the financial capital of America. Naturally, therefore, the largest and most important stock exchange is there.[1]

Investment through the New York Stock Exchange. — Suppose Mr. Investor of St. Paul desires to buy 100 shares of

[1] While the New York Stock Exchange is by far the largest in the city, the New York Curb Market is an important second. For many years the Curb Market was held in the open street (hence the name "Curb"), but in 1922 it moved into a building. In the Curb Market trade is confined to stocks and bonds of large corporations, especially mining corporations, not bought and sold on the New York Stock Exchange.

Key to main features of trading floor of the New York Stock Exchange:

A. Telephone booths, containing private telephones connected with Stock Exchange members' offices.

B. Trading posts. As stocks are admitted to the board for trading, they are assigned to one of these "posts." Thus the brokers with orders to execute in U. S. Steel stock assemble at Post No. 2.

C. Ticker transmitters. As transactions are made, reporters on the floor report the sales to ticker operators. These operators at once send them over the ticker system by means of the typewriterlike electrical sending machines before them.

D. Annunciator call board. The white numbers are operated from the telephone booths. When a broker is wanted, his telephone clerk signals him by pressing a switch in his booth which drops the broker's signal number.

E. Money desk. Offerings of money to loan on collateral security are received from the banks by the money clerk stationed there. Brokers desiring to borrow money are accommodated in the order of their application.

F. Pneumatic tubes, connecting telephone booths with the trading posts. By means of these tubes messages can be sent instantly by the telephone clerks to any post on the floor.

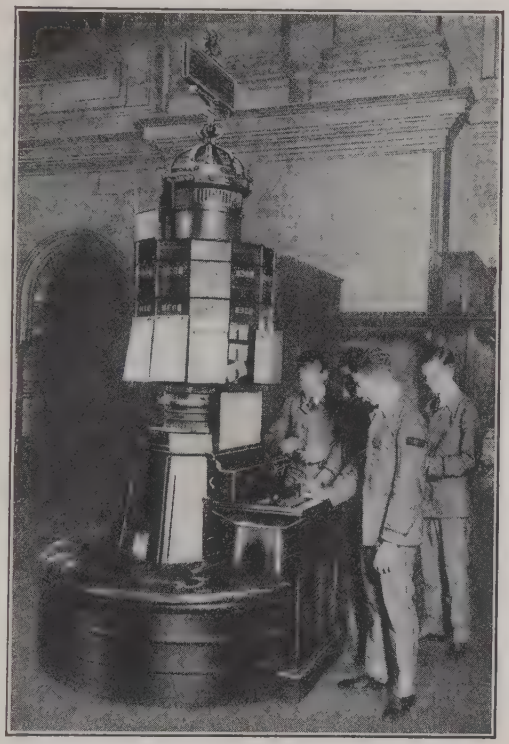
G. Bond market, where domestic and foreign government, railroad, and industrial bonds are bought and sold.

Union Pacific Railroad stock. He learns that this is one of the stocks bought and sold on the floor of the New York Stock Exchange. So, although he does not know any one who desires to sell this stock to him, he is confident that such a one exists and that he can be found through the stock exchange. There are, in his city, a number of brokerage firms connected with the New York Stock Exchange. For example there is T. K. & Co., member of the New York Stock Exchange, with a branch office in St. Paul. He telephones to the branch office of T. K. & Co., ordering the purchase of 100 shares of Union Pacific at $195 per share.[1] Assuming that the manager of the office of T. K. & Co. knows Mr. Investor and feels sure that he will pay for the stock, the manager will telegraph the order to the main office of T. K. & Co., Wall Street, New York City. Immediately on receipt of the order the main office transmits the order by telephone to their broker, Mr. K., on the floor of the Stock Exchange. Broker K. hurries to the post (see picture) where Union Pacific is dealt in and shouts his bid for 100 U. P. at $195. Who will sell the 100 shares to Broker K.?

Let us leave the stock exchange floor for a moment. In Mobile, Alabama, lives a man by the name of Seller. Seller has owned 500 shares of Union Pacific for years and has just decided to sell some of those shares at the current market price. He telephones his selling order to the Mobile office of F. & B., members of the New York Stock Exchange; the order is wired to the New York office, thence telephoned to Broker F. on the floor of the Exchange. Broker F. hears Broker K's bid for 100 U. P. at $195 a share, and signals "sold" to Broker K. Both brokers make a memorandum of the transaction and proceed with the

[1] When orders of this kind are received, it is understood that if the broker can buy the stock for less than the price named, he will do so.

execution of their other orders. In due time the stock certificate, endorsed by Mr. Seller, is transferred to the name of Mr. Investor by the transfer agent of the Union Pacific Railroad in New York City (see page 297), and the new certificate is sent to St. Paul. Mr. Investor, having given his check for $19,500 to T. K. & Co., obtains the certificate. T. K. & Co. settle in New York with the brokerage firm of F. & B., and F. & B. give a check for $19,500 to Mr. Seller in Mobile. Mr. Seller pays a commission to F. & B., and Mr. Investor does likewise to T. K. & Co.[1]

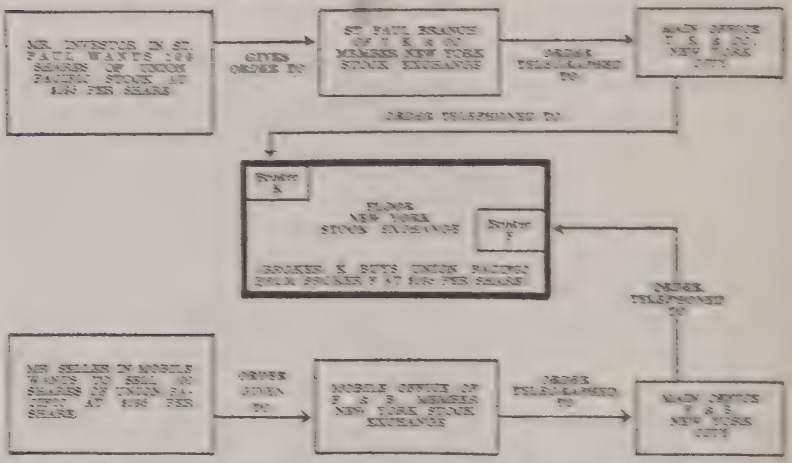


Post Number Two on the Stock Exchange Floor

Each stock is assigned to a certain post, so that brokers on the floor know where to go to execute their different orders. The attendants are here shown receiving messages sent to the post by pneumatic tubes from the telephone operators. Speed in executing orders is thereby gained.

[1] The commission rates on the New York Stock Exchange vary with the price of the securities bought and sold. On this transaction each broker would receive a commission of $25. In addition the seller would pay a federal tax of $2 and a New York State tax of $2, making his total expenses $29, while the buyer's expenses would be $25.

The foregoing transaction may be represented as follows


MR. INVESTOR, IN ST. PAUL WANTS 100 SHARES OF UNION PACIFIC STOCK AT $185 PER SHARE
GIVES ORDER TO
ST. PAUL BRANCH OF F. S. CO. MEMBERS NEW YORK STOCK EXCHANGE
ORDER TELEGRAPHED TO
MAIN OFFICE F. S. CO. NEW YORK CITY
ORDER TELEGRAPHED TO
BOOTH A
FLOOR NEW YORK STOCK EXCHANGE
BOOTH F
BROKER K. BUYS UNION PACIFIC FOR 100 SHARES AT $185 PER SHARE
ORDER TELEGRAPHED TO
MR. SELLER IN MOBILE WANTS TO SELL 100 SHARES OF UNION PACIFIC AT $185 PER SHARE
ORDER GIVEN TO
MOBILE OFFICE OF F. S. MEMBERS NEW YORK STOCK EXCHANGE
ORDER TELEGRAPHED TO
MAIN OFFICE F. S. NEW YORK CITY

How the Orders of Buyers and Sellers Meet on the Stock Exchange

Speculation through the stock exchange. — When a person buys property primarily to secure income from it, he is an investor. When he buys primarily to make a profit through selling it at a higher price than he paid, he is a speculator. The property so purchased may be real estate, it may be stocks, or bonds, or something else. Accordingly, in the foregoing illustration if Mr. Investor bought Union Pacific stock primarily for the dividends he would get, he would have been an investor; but if he bought primarily to make a profit by later selling the stock for more than it cost him, he would have been a speculator. Transactions on the stock exchange are of both kinds, some for investment, some for speculation. Probably a majority of speculative transactions are conducted "on margin," so our example may well illustrate such trading.

Let us suppose that Mr. Speculator has been watching Studebaker common stock. He finds it selling at $62 a share.

He thinks from the condition of the Studebaker Company (its sales, profits, etc.) that the stock is cheap at $62 and will rise in price. He decides to buy. He has $6,500 which he decides he can afford to use for speculation. If he buys outright, he can get only about 100 shares ($100 \times \$62 = \$6{,}200$). If he buys "on margin," he finds he can get 300 shares, because his broker tells him that if he will supply $20 on each share as margin, the broker will lend him the balance. The $20 he supplies is the margin between the amount loaned by the broker and the market price of the stock. Thus:

Market price of each share of stock	$62
Amount supplied by the speculator (as margin)	20
Amount supplied by the broker (as a loan)	$42

The purpose of the margin is to protect the broker's loan in case the stock falls in market price. Should this stock fall as much as $20 a share it could still be sold for enough to pay the loan. All loss, due to a decline in the price of the stock, falls of course on the speculator, not on the broker. Similarly any gain, due to a rise in the price of the stock, goes to the speculator, not to the broker.

Mr. Speculator knows that in case the stock rises he will make three times as much profit, if he buys 300 shares, as if he buys only 100 shares; likewise he will suffer three times the loss, in case the stock falls. He decides to buy 300 shares, on a margin of $20 per share, and to that end gives Broker R. a check for $6,000 and his order for the stock.[1]

[1] Mr. Speculator becomes in this case a "bull," because he wants the stock to rise. If he had taken an opposite position and had wanted the stock to fall he would have become a "bear." When the trend of prices in the stock market is upward, it is known as a "bull market." When the trend is downward, it is known as a "bear market." The terms are said to have originated from the fighting tactics of these animals, bulls tossing up their victims, bears crushing them to the ground.

Broker R. buys the stock on the New York Stock Exchange by exactly the same process as the Union Pacific stock for Mr. Investor was bought in the other example. When the certificate for the 300 shares of Studebaker is delivered to Broker R., the rules of the Stock Exchange provide that he must pay in full for the stock. He has received $6,000 from Mr. Speculator; the balance, which is $12,600, he must provide himself. This sum Broker R. may advance out of the funds of his own firm. More likely, however, he will borrow the funds on the New York money market (to be explained presently). He will arrange for the loan, together with other similar loans, at the money desk on the Stock Exchange floor.[1] As security for the loan of $12,600, Broker R. pledges the 300 shares of Studebaker stock, worth, at $62 per share, $18,600.

A person may speculate by selling, as well as by buying. If he thinks prices are going to fall, he may sell now while they are high, and buy later when prices have dropped.

The stock exchange operates under definite rules of trading. — With orders to buy and to sell coming in to the New York Stock Exchange from all over the country it is evident that, in order to prevent confusion, definite rules must be provided for conducting the business in an orderly way. The hours for opening and closing the exchange must be determined. Arrangements for delivering, and paying for, securities must be made. Methods must be provided for reporting transactions to the public, promptly and accurately. What stocks and bonds may be dealt in on the floor of the exchange must be determined, inasmuch as it is not feasible to have trading in the securities of all the corporations in existence.

[1] See *E* in picture of Stock Exchange floor, page 396.

B. Services of Stock Exchanges

(Provide a market place; aid the flow of capital into industry; forecast business conditions)

The development of the corporation, as a method of raising capital and of conducting business enterprise, has greatly increased the number of stocks and bonds in existence. In addition, the borrowing of the various governmental agencies for war purposes, for highways, for education, and for other purposes has produced a large amount of bonds in recent years. A growing proportion of the wealth of society is represented by these pieces of paper. It is important, therefore, that provision be made for the prompt and proper handling of these securities — provision whereby investors can be informed regarding the value of their stocks and bonds; provision for the quick sale and transfer of securities. Stock exchanges help make such provision.

Stock exchanges provide a market place for securities. — As already shown, the stock exchange furnishes a means whereby persons wishing to sell securities and persons wishing to buy securities may be brought together. An owner of securities can convert them into cash without personally looking up a buyer; the buyer can obtain securities without personally looking up a seller. The convenience of the stock exchange aids the investment of funds, an aid not only to private individuals but also to institutions which have funds to invest.

In providing a market place for securities the stock exchange does another thing — it makes possible the establishment of a fair price. The members of the exchange do not fix prices; they merely execute orders from the outside. But the orders to buy and to sell, coming from all over the country, meet on the exchange. The buying orders tend to raise prices,

the selling orders to lower them. The balance struck between these opposing forces is the market price. Moreover, if the market price of a stock or bond gets out of line with its intrinsic value (based on earning power and other conditions in the corporation), forces are set to work at once to bring the two into line. If the market price is below the real value, speculators buy, expecting to make a profit out of the anticipated rise in price. Their buying tends to make the price rise and come into line with real value. If the price is above the real value, they sell, thereby driving the price downward. Experienced speculators, with the hope of making profits, tend, therefore, to bring about fair prices, prices in line with actual values.

This is only a tendency, however. Skillful speculators sometimes manipulate the market, deliberately getting it out of line with actual values. For example, a group of speculators may form a pool of their funds to " boom " a certain stock. By heavy buying they work the price up, perhaps circulating rumors of large profits being earned by the company whose stock is being bought. They hope, by these tactics, to get persons outside the pool to buy the stock. If the members of the pool succeed in their plan, they gradually unload their stock on these deceived outsiders. In due time the outsiders discover that the condition of the corporation does not justify the high price of the stock. They attempt to sell, only to find that buyers cannot be found except at much lower prices. Serious losses thereupon fall on these outsiders, while the members of the pool have gained through their dishonest tactics. Innocent and inexperienced persons who attempt " to play the stock market " nearly always lose their money. They are no match for clever and experienced traders. They should confine their attention to sound securities, bought or sold for investment only, not for speculation.

While manipulation of stocks is a rather common practice, it still holds true that, in general, fair prices prevail on the stock exchange. Fair prices are an advantage to several groups in society. Those who own securities are usually interested in knowing from time to time what they are worth. Those who are contemplating buying or selling securities can make plans intelligently, knowing that fair prices are established through the stock exchange. Bankers who have loaned money on the security of stocks and bonds must know the market value of those stocks and bonds, in order that their loans may be safe.

The stock exchange aids, indirectly, the flow of capital into industry. — While corporations do not raise capital directly through the stock exchange (see figure, page 394), their task of raising capital is made easier by the existence of the exchange. Many investors are more ready to buy securities if they know they can sell their securities quickly and conveniently through a stock exchange. Moreover, the fact that the shares of stock or the bonds of a certain corporation are listed on a prominent stock exchange advertises those shares or bonds. Public interest can usually be aroused in a listed stock more easily than in an unlisted one. Accordingly, when a corporation comes to raise additional capital the new shares or bonds are more easily sold if the public knows that the securities of that corporation have been listed for some time on a stock exchange, and that the new securities will likewise find a market there.

The stock market forecasts general business conditions. — The eagerness of speculators to make profits causes them to watch business conditions closely. Stocks usually rise when business conditions are improving, and fall when business becomes depressed, because business conditions affect the earning power of corporations, thereby affecting the value of

their stocks. If a speculator can detect signs of an improvement in business conditions before others do so, he may profit by buying stocks while they are still cheap. To gain such profits speculators are alert to discover evidences of a change in business. Their quickness in buying or selling causes stock prices to rise or fall before the change in business is generally realized by the public. For this reason the prices of stocks are commonly said to be a barometer which forecasts changes in business.

Not every advance in the price of stocks can be interpreted as a sign of improving business, nor does every decline in stocks foretell the approach of business depression. Other factors, besides future business conditions, affect stock prices. But in general it holds true that stock prices are watched by those interested in business conditions because in many cases they *do* foretell changes in business.

C. The Operation of the Money Market

(The money desk; the demand for funds in the market; the supply of funds; the rate of interest)

Loans are usually arranged at the money desk. — When Mr. Speculator bought his 300 shares of Studebaker on margin (page 401), it was stated that his broker borrowed $12,600 to complete payment for the stock, and that this loan was arranged at the *money desk* on the floor of the exchange, the funds coming from the New York money market. This money desk is provided for the convenience of the members of the stock exchange who have to arrange loans. Each member desiring to borrow money files a memorandum of the amount with the clerk at the desk. Each bank in New York desiring to lend money to brokers likewise files a memorandum. In this way the demand for funds and the supply of

funds become known. A fair rate of interest can then be established by the bargaining of the two parties — those representing the demand and those representing the supply. If any broker thinks the rate posted at the money desk is too high, he is at liberty to borrow the funds elsewhere, either in New York or outside New York. If any bank thinks the rate is too low, it may refuse to lend its funds for that rate and employ its money in other ways. However, the rate suggested at the money desk is commonly regarded as fair and is generally adopted by borrowers and lenders on the stock market.

Loans may be either time loans or call loans. — In some cases both lenders and borrowers desire to have the loan run for a definite time, hence a *time* loan is arranged. Time loans in the New York money market generally run for three, six, nine, or twelve months, and the rate of interest is set at the beginning and does not vary during the duration of the loan. In other cases one or both parties desire to have the loan so arranged that it can be terminated on a day's notice, and hence a *call* loan is arranged. Call loans are renewed each day, often at a different rate of interest, either higher or lower than the rate on the original loan. Call loans prove their usefulness when a New York banker suddenly needs funds (perhaps because correspondent banks in the interior suddenly withdraw funds from his bank), for at such times he can terminate some of his call loans and get his money. Or the borrowing broker may want to terminate the call loan, perhaps because some of his customers sell their holdings of stock and pay off their indebtedness to him.

The New York money market brings demand and supply together. — The money desk of the stock exchange is only one phase of the New York money market. Funds are borrowed in the city for other purposes than those represented at the money desk.

For example, the *demand* for funds in the New York money market springs, not only from brokers on the stock exchange, but also from dealers in "bills" and other financial instruments. "Bill dealers," as the term is used in the money market, means dealers that handle not only bills of exchange (which are drafts drawn on parties in foreign countries), but also domestic drafts, trade and bankers' acceptances, commercial paper, and even short-term government securities.[1] Bill dealers are a great assistance in carrying on our business enterprises because they stand ready to purchase promptly the "bills" of business concerns, thus supplying business firms with needed funds. Since New York is the financial center of the country, a constant stream of bills, arising out of both foreign and domestic commerce, pours into the offices of bill dealers in that city. The bill dealers obtain funds for the purchase of these bills through the money market.

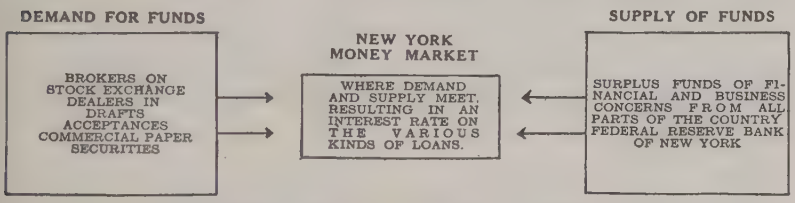
In addition to the stream of bills pouring into the money market, there is a rather constant flow into the New York market of new securities for sale. A New York bond house, for example, buys a $10,000,000 issue of bonds from a public service company in Ohio; another bond house buys $14,000,000 worth of bonds from the Republic of Chile; or the State of North Carolina sells $10,000,000 of highway-construction bonds to a New York investment house. While most of these securities may be sold later to investors, they must be paid for when purchased or soon thereafter. Investment houses are, therefore, borrowing funds almost continuously in the money market, in order to carry their investments until they can resell to investors.

Moreover, country banks borrow money from time to time from their New York correspondents (see page 359). This

[1] For explanation of the nature and uses of these instruments see Chapters X and XI.

adds to the demand for funds in that market. Accordingly, we find that the *demand* for funds in the money market comes ultimately from the needs of governments and business firms throughout the country; immediately and locally it comes from brokers on the stock exchange, from dealers in bills and investments, and from certain banks needing funds.

The *supply* of funds to meet this demand in the money market comes, likewise, from all over the country. Banks throughout the nation, after taking care of the needs of their customers, often have surplus funds on their hands. These


DEMAND FOR FUNDS
BROKERS ON STOCK EXCHANGE
DEALERS IN
DRAFTS
ACCEPTANCES
COMMERCIAL PAPER
SECURITIES
NEW YORK MONEY MARKET
WHERE DEMAND AND SUPPLY MEET, RESULTING IN AN INTEREST RATE ON THE VARIOUS KINDS OF LOANS.
SUPPLY OF FUNDS
SURPLUS FUNDS OF FINANCIAL AND BUSINESS CONCERNS FROM ALL PARTS OF THE COUNTRY
FEDERAL RESERVE BANK OF NEW YORK

Where Demand and Supply Meet

surplus funds are commonly deposited in correspondent banks (see page 358), either in New York or in local centers, such as Baltimore, Richmond, New Orleans, St. Louis, Chicago, and San Francisco. The banks in these local centers, in turn, carry deposit accounts in New York banks, to which they may send their surplus funds. The result is that the country's idle funds gravitate to New York to find employment. Employment is found in meeting the demand previously mentioned.

The New York Federal Reserve Bank influences the supply of funds in the market through its policy of loans and investments. When funds are flowing to New York from the interior, the reserve bank may absorb some of the surplus by having the New York member banks pay off their loans to the reserve bank, or by selling some of its own investments

in the money market. Conversely, when funds are flowing away from New York to the interior, the reserve bank may release funds by extending loans to its member banks or by purchasing additional investments in the market. In these ways the reserve bank acts as a stabilizer in the market. The advantage of such action is that stabilizing the supply of funds tends to stabilize the rate of interest. If it were not for the reserve bank, every important withdrawal of funds from New York would cause a rise in the interest rate by decreasing the supply of funds; and every large movement of funds to New York would cause a fall in the rate by increasing the supply. A steady rate of interest is an advantage to those using the market because it enables those borrowing to calculate in advance what the funds will cost them, and it enables those lending to know what the funds will yield them.

The rate of interest in the New York market does not, of course, remain the same for an indefinite time. It changes in response to important changes in the supply and demand. When business conditions are growing more active, with an upward trend in the prices of commodities, or when speculation in stocks is very heavy, the demand for funds in the money market is materially increased. If no corresponding increase occurs in the supply the rate of interest will rise. The reverse occurs when the supply increases faster than the demand.

Not only do the rates vary from time to time, but they also vary with different forms of loans. For example, the call-loan rate may be $4\frac{1}{2}$ per cent, while the rate on 90-day loans may be 4 per cent, the difference being due to the demand and supply of funds in the two types of loans. Similarly, the rate on high-grade commercial paper may be $4\frac{1}{2}$ per cent, while the rate on bankers' acceptances may be 3 per cent.

The New York money market is not the only money market in the United States. In fact it may be said that a money market exists in every city in which an important demand and a considerable supply of funds exist. But the money markets outside New York usually concern only banks and business firms in those local communities, whereas the New York market is really national, even international, in scope. To the financial district of New York, commonly referred to as "Wall Street," come those who have bills and investments to sell, as well as speculative and investment orders on the stock exchange; to the same district come the idle funds of the nation seeking employment. The two meet in the

MONEY.

Friday, May 17, 1929.

Continued large supply of money for Stock Exchange purposes for which there was relatively a poor demand made for another easy session in call loans, the rate dropping to 6 per cent at midday, after renewing at 8. Street trades were arranged at 5. Bank withdrawals were light, leaving much money unloaned at close. Time money was dull and unchanged at 9 per cent for short dates, and 8¾ for longer maturities. A little 30-90 days' was done at 9 per cent. Commercial paper and acceptances developed no change in discount.

Call Loans.

Renewals.	High.	Low.	Last.	Thurs-day's Last.	Year Ago.
8	8	6	6	8	6

Time Loans.

		Thurs-day.	Year
60-90 days	9	9	5¼@5½
4-5-6 months	8¾	8¾	5¼@5½

Commercial Paper.

	Thurs-day.	Year Ago.
Best names, 4 to 6 months..6	6	4½@4¾
Other names, 4 to 6 months..6	6	5

Bankers' Acceptances.

Prime bankers' acceptances, eligible for purchase or rediscount by Federal Reserve Banks. Rates quoted are for discount at purchase:

	Bid.	Asked.
30 days	5⅝	5½
60 days	5⅝	5½
90 days	5⅝	5½
Four months	5¾	5½
Five months	5¾	5½
Six months	5¾	5½

London Market.

Money off ¼ per cent at 4 per cent;

RATES IN THE NEW YORK MONEY MARKET

money market, an essential part of the world's financial system.[1]

D. Reporting the Financial News

(Ticker service; the financial page; the periodicals)

The work of the stock exchanges and the condition of the New York money market concern the public. Not only are speculators and investors interested, but bankers and business men also, since, as we have seen, conditions in the stock and money markets both reflect and forecast business conditions. It is important, therefore, that quick and accurate reports be forthcoming from these markets.

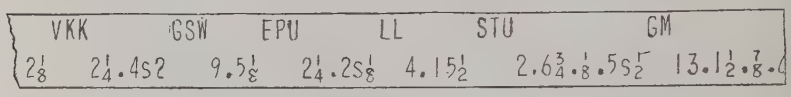
Transactions on the New York Stock Exchange are reported in several ways. — The quickest way by which stock exchange transactions are made known to the public is by the ticker service. At various points on the floor of the exchange are ticker transmitters, run by electricity (see *C* in picture on page 396). Operators at these machines send out reports of the transactions made on the floor. Receiving ticker machines are installed in brokerage offices and other places outside the exchange, and these receiving machines print the reports of the transactions on a narrow strip of paper called the "tape." Ordinarily, therefore, within a few seconds after a sale is made it is known wherever the ticker system is installed. Occasionally, however, when the volume of business on the floor of the exchange is very heavy, the ticker may get as much as thirty minutes or even an hour or more behind the market.

[1] Only a few of New York's large financial institutions are situated on Wall Street, but the fact that Wall Street is the center of the financial district has made the term "Wall Street" famous. Many persons who are ignorant of the facts about the New York money market shudder at the thought of the "Wall Street octopus with its tentacles spread all over the country."

STOCK BROKER'S OFFICE

Showing ticker machines printing the "tape" and board on which quotations of leading stocks are posted.

Nowadays, in addition to the ticker, the radio, telegraph, and press are used to broadcast stock-exchange transactions. For those who can wait a few hours, the newspapers furnish a report of the day's business. Practically every newspaper in the country carries, on its financial page, a full or an abbreviated report of the daily transactions on the New York Stock Exchange. In addition to reporting the New York



Ticker Tape

The ticker prints reports of the transactions practically as fast as they occur on the floor of the exchange. To save time and space, each stock is given a symbol. For example: VKK = Victor Talking Machine Company, GSW = Great Western Sugar Company, EPU = Engineers Public Service Company, LL = Louisiana Oil Refining Corporation, STU = Studebaker Corporation, GM = General Motors Corporation.

The lower line gives the number of shares sold and the price. For example: If stock in the Great Western Sugar Company has been previously selling for, say, about 62 (the tape reader is supposed to know that), the figure 9 before the decimal above after GSW means 900 shares (the Exchange counts only in *hundreds*). The 5⅛ after the decimal means .65⅛ (the *last digit only* of the price being given on the tape). If the price is quoted alone after the decimal with no number preceding, 100 shares are understood. Thus in the case of the Studebaker Corporation, 200 shares sold at .76¾ (the 70 being assumed here), 100 at .76⅛, and 5 (*S* has now to be introduced to show 5 means number of *shares* and not *price*) at .76½.

Stock Exchange, the page may carry a report of the New York Curb Market and of one or more local markets. New England papers, for example, may carry reports of the Boston stock market, Michigan papers of the Detroit and Chicago stock markets, and Pacific Coast papers of the San Francisco market.

Papers that carry a complete report of the transactions of the New York Stock Exchange usually give the number of shares of each stock sold during the day, the highest price at which that stock sold during the day (called the " high "),

the lowest price at which that stock sold during the day (called the " low "), and the price at which the last sale for the day was made (called the " last " or " close "). Some papers report the dividends, if any, being paid on each stock, and the yield, in percentage, of the dividends on the market price.[1] For example, the clipping on the next page shows that there were 500 shares of the first stock sold during the day, the stock being that of the Abitibi Power and Paper Company. The highest price at which any of it sold during the day was $43 per share, the lowest $42 per share, and the last or closing sale was at $42 per share. The second stock listed is the preferred stock of the same company, indicated by the letters " pf."

The money market and other financial news is reported on the financial page. — While the report of the New York Stock Exchange is the most conspicuous feature of the financial page of a newspaper, it is not the only feature. The rate of interest prevailing on different types of loans in the New York money market is usually printed (see clipping page 411). The price of various foreign currencies in terms of American money is published for the benefit of exporters, importers, bankers, and others having remittances to make to foreigners, or collections due from foreigners. Events of the day having financial significance, such as the flotation of a large issue of stocks or bonds, or the financial report of an important corporation, are usually found on the financial page. Opinions of prominent business men and bankers, whose names carry weight in their special fields, may be run in the news columns. Comments on the stock and bond markets, sometimes accom-

[1] The yield is computed by dividing the dividends by the market price. For example, if a stock is paying $3 a year dividends and can be bought for $50 a share the yield is 6 per cent; a stock costing $130 per share, paying $5 annual dividends, yields 3.8 per cent.

Business Transactions On New York Stock Exchange

Furnished By Leased Wire Of The Associated Press

NEW YORK, Jan. 10.—(AP)—Following is the complete closing list of Thursday's transactions on the New York stock exchange:

Sales (Hundreds)		High	Low	Close
	A			
5	Abitibi P and P	43	42	42
2	xdAbitibi PP pf	86	84	84
6	Abra and St	152½	150	150
20	aAbra and St pf	110½	110½	110½
20	Adv Rum	52½	52	52
3	Ahumada Ld	4	3⅞	3⅞
62	Air Reduc new	103½	100½	102½
15	Ajax Rub	10	9⅞	10
73	Alaska Juneau	9⅞	9⅛	9⅛
84	Al Ch and D	259	250½	254
13	Al Chal Mfg	193	183⅝	191½
2	Amal Leath pf	70½	70⅛	70⅛
19	Amerada Corp	9⅞	9⅛	9⅛
7	Am Agri Ch	21½	20⅛	21½
4	Am Agri Ch pf	69⅝	69	69
18	Am Bk Note	129	126½	128
1	Am Beet Sug	17	17	17
2	Am Beet Sug pf	51	51	51
12	Am Bosch Mag	43⅜	42⅜	42⅜
11	Am Brake Shoe	47½	46½	46⅝
5	Am Brown Bov El	16	15⅜	15½
10	aAm Brown Bov pf	51	51	51
400	Am Can	118½	115⅞	117⅜
18	Am Car & Fdy	104½	103½	103½
1	Am Chain pf	77	77	77
11	Am Chicle	48½	48	48
16	Am Drug Syn	10⅜	10⅛	10⅛
2	Am Express	288	287	287
23	Am & For Pow	80⅜	80	80
2	Am & For P 7c pf	108	107½	107½
3	Am & F P 2d 8c	98⅜	98⅛	98⅛
1	Am Home Prod	75½	75½	75½
7	Am Ice	40	39½	40
23	Am International	144⅞	143½	143⅜
8	Am-La F & F	8⅜	8⅛	8⅛
10	Am Loco	112	111	111
1	Am Loco pf	116		

Sales (Hundreds)		High	Low	Close
1	Cub Am Sug	16	16	16
4	Cub Dom Sug	6⅛	5⅞	6⅛
2	Cudahy Pack	63½	63	63½
124	Curtiss Aero	159⅜	155⅜	157
10	aCushm S pc pf	110	110	110
1	Cutler Ham	63	63	63
1	Cuyamel Fruit	65	65	65
	D			
5	Dav Chem	64⅞	64	64½
11	Deben Sec	43½	40⅜	43⅛
100	aDeere and Co pf	127	127	127
3	Dela and Hud	195½	194½	195½
2	Del L and W	127½	127	127½
1	Den R Gr and W	56	56	56
2	Detroit Edison	226	224	226
3	Dev and R A	56	55⅜	56
170	aDiam Match	164	161	161
33	Dome Mines	10⅜	10⅛	10⅛
21	Drug Inc	118	116	118
2	Dunhill Inter	76½	76	76
3	du P de Nem	504	501	504
2	xd du P de Nem d	117½	117	117
	E			
35	Eastm Kodak	186⅜	183	183½
181	Eat Axle and S	67	65½	65⅝
34	Eisenlohrand B	102½	105½	108
	F			
27	Eltingon Schild	39⅜	39	39
2	Elting Sch pf	112½	112	112
49	Elec Auto Lite	140	134	139½
10	aEl Auto Lit pf	110½	110½	110½
1	Elec Boat	12⅜	12⅜	12⅜
128	El P & Lgt	47	45⅝	45⅝
1	El P & L pf	106½	106½	106½
36	Elec Stor Batt	87⅞	86⅜	87½
2	Emer Brant A	13	12½	13
1	Emer Brant B	4	4	4
4	Endfcott John	80⅜	79⅞	80⅜
	Eng Pub Serv	51⅛	51⅛	51⅛
	Eng Pub S pf	90½		

Sales (Hundreds)		High	Low	Close
17	Manh El Sup	34	32½	33½
40	Manh Ry gtd	84½	84	84½
4	Manh mod gtd	56½	54⅝	55½
2	Manh Shirt	33⅜	33⅛	33⅜
1	Mara Oil Exp	16⅜	16⅜	16⅜
105	Marland Oil	45⅜	44⅛	44⅜
4	Marlin Rockw	74⅜	74⅛	74⅛
1	Martin Parry	17⅞	17⅜	17⅜
7	Math Alkali	184½	183	184½
74	May Dept St	105½	103½	103½
2	Maytag	23⅜	23⅛	23⅛
1	Maytag 1st pf	90⅜	90⅛	90⅛
3	Maytag pf war	43⅜	43⅜	43⅜
3	McCall Corp	73⅞	73	73
4	McCrory St B	102½	101	102
1	McIn Porc My	21	21	21
10	McKees Tin	73⅞	72⅜	73½
2	McKes and Rob	49⅞	49⅛	49⅛
4	McKes and R pf	59	58⅛	59
5	Melville Shoe	69½	69	69½
100	Mengel Co	32½	31½	32
12	Metro-Gold pf	25	24	24⅜
170	Mex Seab Oil	62	60	61
57	Miami Cop	33⅜	32½	32⅝
39	xdMid-Con Pet	36⅛	35½	35½
4	Mid States Oil	4⅜	4⅜	4⅜
2	Mid St Oil ctf	3⅜	3½	3½
1	Mid Steel Prod pf	255	255	255
4	Miller Rubber	24½	24	24½
18	Minn & St L	3½	3⅜	3⅜
10	aM St P & S S M	63½	63½	63½
88	Miss Kan & Tex	53⅜	51⅝	53
2	Miss K & T pf	103½	103½	103½
29	Miss Pacific	66⅝	66⅛	66⅜
16	Miss Pacific pf	125	121⅜	123
29	Mohawk Cpt Mill	74	73	73½
280	Montgomery Ward	146⅞	144½	145⅞
74	Moon Motor Car	7⅜	7	7⅜
38	Mother Lod Coalit	3⅜	3⅜	3⅜
9	Mot Plct Capital	16	15	16
1	Moto Meter A	24	23½	23½
1	Motor Prod	175	175	175
	Motor Whe	45	44	

panied by advice to buy or sell certain stocks, issued by brokerage houses may be featured. In short, the financial page tries to carry the type of financial information thought to be of most interest and value to its readers.

Periodicals report and discuss financial news. — If a person desires to know simply what has happened in the financial world, he may be promptly informed by ticker, radio, or the daily press. If, however, he desires a discussion of the events, an interpretation of the news, he will find it in the periodicals, especially in the financial journals. Some periodicals of a general nature have a section of each issue devoted to financial affairs.[1] Other periodicals deal primarily or exclusively with financial matters, their writers specializing on discussions of business and financial conditions.[2] Naturally one finds in these financial periodicals the most complete and satisfactory analysis of the trend of financial affairs.

Summary. — Stock exchanges exist to bring together buyers and sellers of stocks and bonds. The actual buying and selling is done by brokers, who act as agents for the buyers and sellers. On the largest exchange in the country, the New York Stock Exchange, the volume of trading is so heavy that elaborate rules are made governing the operations. Besides providing a market place for trade in stocks and bonds, exchanges indirectly aid the flow of capital from investors into the hands of corporations, and frequently forecast changes in business conditions. Brokers on the stock exchange, dealers in commercial paper, bankers' acceptances, and bonds, together with country banks are borrowing funds almost continuously from the New York City banks. These banks obtain the funds to lend from their own resources together with deposits made

[1] See, for example, the *Review of Reviews* and the *Literary Digest.*

[2] Examples are *The Commercial and Financial Chronicle, The Magazine of Wall Street, The Financial World,* and *The Federal Reserve Bulletin.*

with them by country banks which have a surplus of funds. The New York money market is the name given to this system by which the surplus funds of the entire country, flowing to New York, meet there the demand for funds arising from all over the country.

The Federal Reserve Bank of New York helps stabilize the supply of funds in this market by releasing and withdrawing funds from time to time through the purchase and sale of acceptances and government securities.

Financial news is disseminated by ticker, by radio, and by the press. Discussion and interpretation of the news are given by the financial periodicals.

QUESTIONS

1. Define or explain:
   (*a*) Member of the New York Stock Exchange
   (*b*) Speculator in stocks
   (*c*) Margin trading
   (*d*) Money desk
   (*e*) Bill dealers
   (*f*) Ticker
   (*g*) Call loan

2. "The stock exchange does not supply capital directly to corporations. However, it aids corporations indirectly in getting capital." Explain.

3. "The stock exchange does not distribute securities from corporations to investors. It redistributes them among investors." Explain.

4. Show how a stock exchange would be of service to you if:

(*a*) You had suddenly come into the possession of $5,000 in cash.

(*b*) You were a banker and were asked to lend Jones $5,000, the loan to be secured by a pledge of 50 shares of U. S. Steel stock.

(*c*) You owned a house and lot and some one offered you 100 shares of N. Y. Central Railroad stock for your house and lot.

(*d*) You owned 100 shares of N. Y. Central stock and suddenly had to raise $10,000 in cash.

5. Why do the prices on the stock exchange frequently forecast changes in business conditions? Who are benefited thereby?

6. On the circulars describing a new issue of shares of stock one sometimes finds the statement, "Application will be made to list these shares on the

New York Stock Exchange." What is meant by listing shares? Why is this statement regarded as helpful in selling the new stock?

7. In discussions of the stock market one frequently encounters the terms "long" and "short." One who is "long" on stocks has already bought, and wants prices to rise so that he can sell at a profit. One who is "short" has already sold, and wants prices to fall so that he can buy advantageously. Prove that a "long" would be a "bull" in the market, while a "short" would be a "bear."

8. "Selling short" means selling stock which the speculator does not own. Since he expects the price to fall, he sells stock now, hoping to buy at a lower price later. Some persons hold that it is wrong to sell what you do not own. Do you agree? How about the farmer who contracts in the spring to sell his sweet corn to a canning factory and delivers it in September? Or the contractor who sells a house which he has not yet built? Are they selling "short"?

9. Point out the relationships between the stock exchange and the money market; between foreign commerce and the money market.

10. Show how the New York money market might be the means by which surplus funds in Columbus, Ohio, were used to pay for bonds bought by a New York bond house from a St. Louis shoe manufacturer.

11. Show how the needs of the interior banks have helped create the New York money market.

12. "The New York Federal Reserve Bank sustains a different relation to the money market from that which the other banks sustain. In fact, a really satisfactory money market cannot exist without such an institution as the reserve bank." Explain this statement.

13. What is meant by the term "Wall Street, the money center"? Are the "barons" of Wall Street enemies of the welfare of the country? What are the principal services Wall Street renders to the country?

14. What service does the ticker render to the public?

15. Explain how the financial page would be of value to:

(*a*) A farmer
(*b*) A department-store manager
(*c*) A bond salesman
(*d*) A clerk in a bank
(*e*) A man with $1,000 to lend
(*f*) A man desiring to borrow $1,000

16. Why do the New York City papers give, on the average, more space to financial news than papers in other large cities?

17. The *New York Times* publishes each day an average of the prices of 25 railroad stocks, of 25 industrial stocks, and of the 50 combined, also the net change in these stocks compared with the day before. Assuming that these

50 stocks are "leaders" or "key" stocks, what conclusions might be drawn from changes in their prices? Who would be interested in the average price of 50 stocks?

18. Examine the financial page of your own daily paper. Make a list of the items you understand. Make a list of the items you do not understand, planning by further reading and discussion to be able to strike off these items one by one as you come to understand them. Pick out a stock and tabulate its closing price each day for a month. What is its trend? How do you explain the changes in its price from day to day? from month to month? from this year compared to one, two, and five years ago?

TOPICS FOR FURTHER STUDY

1. The New York Stock Market:

   Meeker, *The Work of the Stock Exchange*, chaps. I–IV, XIV, XV, XVII, XVIII.

   Atwood, *The Exchange and Speculation*, chaps. I–VIII.

   Huebner, *The Stock Market*, chaps. I–V.

   Moulton, *Financial Organization*, Revised Edition, chap. XV.

2. The New York Money Market:

   Meeker, *The Work of the Stock Exchange*, chap. VIII.

   Huebner, *The Stock Market*, chap. XVIII.

   Dewey and Shugrue, *Banking and Credit*, chap. XXX.

CHAPTER XXII

FINANCIAL INSTITUTIONS AND THE INVESTOR

A. The Chief Tests of an Investment
B. The Chief Forms of Investment
C. Testing the Chief Forms of Investment

The preceding chapters, dealing with various financial institutions, have discussed what these institutions do for society. They have been looking at the institution from the social point of view, telling how each institution aids in getting society's work done.

This chapter changes the point of view. We are here concerned with the question, What do these institutions do for the individual? This is especially appropriate for the individual who is saving money and is confronted with the task of investing it.

The individual must make his own investment program. — Suppose Shaw has saved $2,000 and is adding to his savings at the rate of $50 a month. Should he place his money in a savings bank or buy bonds? Or would it be wiser to join a building and loan association, paying on his shares at the rate of $50 a month? Should he place all his savings in any one form, or should he diversify his investments by using several of these institutions? Every investor, whether he has $10 a month to invest or whether he has $10,000 a month, faces these questions. He must decide whether to use one or more than one form of investment; if more than one, how much he

will invest in each. He must choose among the different institutions in society offering to aid him in investing his funds.

Every investor, if he stops to think about the matter, would say, probably, that he wants the best investment, the ideal investment, the one without any disadvantages. Unfortunately, there is no such investment. Some possible disadvantage is present in every investment. Each form of investment has its own peculiar advantages and disadvantages. The wise investor is the one who knows the disadvantages as well as the advantages, and plans his investment program accordingly. If all investors did this, the result might be that no two individuals would have exactly the same program, for what proved an advantage to one might well prove a disadvantage to another; and what proved a great advantage to one might prove only a slight advantage to another. The most important duty of a saver is to analyze his own particular case, then place his money so as to combine the most advantages with the fewest disadvantages — *to himself*.

A. The Chief Tests of an Investment

(Safety; yield; marketability; chance for appreciation; collateral value; freedom from care; incentive to save)

The different investments may be judged by tests. — The principal advantages and disadvantages of a particular investment can be discovered only by applying tests. Of the many tests that might be applied, there are seven of chief importance:

1. *How safe is the investment?* — Some investments are safer than others, although no investment possesses absolute safety. A deposit in a savings bank is safer, as a rule, than the purchase of shares of stock in a mining enterprise. A

United States government bond is safer than a Brazilian government bond or a mortgage loan placed on a house and lot. While some risk of loss attends every investment, there are degrees of risk varying all the way from fairly safe investments to highly risky ones. Some individuals prefer the safer investments while others prefer to take considerable risks.

2. *How high is the yield?* — By the yield is meant the income derived from the investment compared to the amount invested. It is expressed as a percentage, obtained by dividing the annual income by the amount invested. For example, the yield on a savings bank account is 4 per cent, if the bank pays $4 a year interest on $100 deposited; the yield on a share of stock paying $8 dividends annually and purchased for $133, is 6.01 per cent. Naturally, the investor wants a high yield, but high yields are usually gained only in fields in which there is considerable risk of losing one's money, as in newly started enterprises, for example. On the other hand, if one is willing to accept a low yield he may get a high degree of safety in his investment, as in most government bonds. There is, therefore, some conflict between safety and yield (Tests 1 and 2). High safety usually means low yield.

3. *How marketable is the investment?* — With some persons it is important that they be able to get their funds out of an investment quickly, in case they need the money. The speed with which one can recover his cash depends on the marketability of the investment. Some stocks and bonds, especially those listed on the New York Stock Exchange (see page 397), are marketable quickly, whereas certain other stocks and bonds may be marketed only with difficulty and delay. A savings-bank account can ordinarily be cashed within a few hours, whereas the typical farm-mortgage loan is not readily marketable at all.

4. *What chance for appreciation has the investment?* — If a man invests in well-located real estate, say a house and lot in a developing section of the city or a vacant lot near the business district of a rapidly growing city, he will probably find that his property will grow, or appreciate, in value. Well-selected stocks in sound corporations, established in growing industries, also have a good chance for appreciation in value, as the business of these corporations grows. On the other hand, when a person deposits $100 in a savings bank, his investment, apart from the interest, has no chance to appreciate in value. The bank agrees to return only $100 to him. When Smith lends Shaw $1,000, there can be no appreciation in the value of the investment, for Shaw will pay back only $1,000 of principal. The chance for appreciation gives a speculative flavor to an investment.

5. *Has the investment high value as collateral?* — Under certain circumstances it is advisable for an investor to retain his investment but to borrow money, using the investment as collateral to secure the loan. For example, Smith purchases 200 shares of General Motors stock as an investment. Later, he needs $7,000 cash. Believing that his stock has a good chance for appreciation, he desires to keep it, but it is the only source from which to raise the $7,000. Taking his stock certificate to the bank, he finds that he can readily borrow $7,000 on the certificate as collateral. If his investment had taken the form of a personal loan to Shaw or the purchase of shares of stock in a small, obscure corporation, it might have been impossible for him to borrow, for the bank might have refused to lend on such collateral. In general, the more marketable an investment is, the better collateral it is, for the lender can easily convert marketable collateral into cash in case the borrower does not repay the loan.

6. *How much attention does the investment require?* — Some

investments must be watched closely to prevent loss to the owner. The ownership of real estate which is rented to careless parties is an example, as is investment in stocks or bonds of corporations which are slipping into a condition of poor earning power. Other investments require little attention, either because the investment itself is quite safe, as in the case of our own government bonds, or because some one else really looks after the investment, as in the case of a savings-bank deposit or an estate committed to a trustee for management. Usually the investments which require little care yield a low return, while those requiring considerable attention pay better. Some persons have the ability and inclination to pay close attention to their investments, whereas others are unable or unwilling to give thought to the matter. The former class should choose the investments requiring watchful care on their part, while the latter class should choose those which are managed by others or those requiring only slight attention.

7. *How much incentive to save does the investment offer?* — Most persons find that saving is not difficult if they get into the habit of saving. If one has obligated himself to save a certain amount every week or every month, as in making monthly payments on a home, he comes to regard such saving as a necessary part of his living. To a large extent it ceases to be a sacrifice. For this reason, regular, systematic saving is to be recommended. Some investments require regular payments, and for that reason offer a strong incentive to save. Others offer little or no incentive to save regularly.

If any form of investment scored 100 per cent on all seven tests for every individual, the task of investing successfully would be simple.[1] Unfortunately, no form of investment

[1] The seven tests given are probably the most important tests, but are not the only ones. For some persons the following might also be important tests:

is perfect. The yield may be high, but the safety questionable. Chance for appreciation may be good, but it may tie up one's funds for too long a time. The individual must try to combine as many advantages with as few disadvantages as possible.

B. The Chief Forms of Investment

(Savings accounts; shares in building and loan associations; purchase of real estate; mortgage loans; life insurance; trust estates; stocks and bonds)

There are seven principal forms of investment. — Among the chief forms of investment there is one that cannot be tested by our seven tests — investing in one's own business. Inasmuch as every man's business differs from every other man's, it is impossible to judge this form of investment in general. There are, however, seven widely used forms of investment to which our tests can be applied. The investor may:

1. *Place his money at interest in a savings account.* — There are several types of institutions in society which agree to pay interest on funds deposited with them, but the most important is the savings bank, including in that term the savings department of commercial banks (see pages 220 and 366). The bank is convenient to reach, the operation of making the deposit is simple, and the interest is compounded frequently, usually four times a year. What the bank does with the saver's funds was explained in Chapter XIII.

2. *Join a building and loan association.* — Unfortunately, these institutions, as a rule, are not so numerous and convenient to reach as banks. Many savers are not acquainted

Is the investment subject to taxation or is it exempt from taxation? Does the investment mature at a time when the investor will want his money to be returned to him? Does the income from the investment come at suitable times?

with the splendid advantages of these associations, nor do they realize that joining an association is as simple and easy as opening a savings account in a bank. The principles upon which these associations operate were shown in Chapter XIV.

3. *Purchase real estate.* — The two preceding forms of investment involve turning over one's money to others who really place the saver's money for him. The purchase of real estate, however, means that the saver himself decides what shall ultimately be done with his money. Real estate is purchased in some cases for one's own use, as in buying a home or a farm to be run by the owner; in other cases for other people's use, as in the purchase of property to be rented; in still other cases, for nobody's use, as when vacant lots are bought and held vacant.

When the investor buys for his own home he is usually displaying mixed motives, investment being only one, and sometimes a subordinate, motive for the purchase. Other motives may be the desire to get his family into a different neighborhood, the eagerness to have a place of his own to "fix up," or the wish to be free from responsibility to a landlord.

Buying real estate usually involves "paying down" a considerable amount, which places it beyond the reach of many small investors.

4. *Make a mortgage loan.* — Mortgage loans are made with some form of property, usually real estate, as security. As explained in Chapter XV, in some cases one investor is in a position to advance the entire amount of the loan. In other cases, especially when the amount involved is quite large, it becomes necessary to obtain the sum from a number of investors. For this purpose mortgage-bond companies operate, placing the mortgage in trust, breaking up the loan into amounts suitable for the investor, and selling the loan

in the form of bonds. These mortgage bonds naturally vary in soundness and desirability.

5. *Buy life insurance.* — Whether the policy holder realizes it or not, in almost every form of life-insurance policy he is *investing* his money, since he or his beneficiary will withdraw the funds. (For an explanation of the different forms of policies, see Chapter XVIII.) Not all savers can invest in life insurance, inasmuch as some cannot pass the required medical examination. Like the buyer of a home, the purchaser of life insurance is often dominated by motives other than investment, the protection of his dependents being often the chief motive.

6. *Create a trust estate.* — For one who does not care to be burdened with investment problems, the appointment of a trustee offers relief (see Chapter XVII). Most commonly a trust company is chosen to act in this capacity. As trustee and agent for the investor, the trust company may assume some or all of the investment responsibilities, depending on the agreement made. Committing one's funds to a trustee is a form of investment used chiefly by those owning and saving large sums.

7. *Purchase securities.* — When the word "investment" is used, most persons think of securities, especially bonds. Probably more human energy is spent in catering to the demand for securities than to any other type of investment. Stock exchanges, bond and investment houses, brokerage firms, and a small army of salesmen and promoters of new enterprises are engaged in moving securities into the hands of investors. Not all securities are, of course, to be classed as investments. Many are mere speculations and some are downright frauds (see pages 280–283). The investor must learn to choose the good from the bad or to take advice from a competent investment expert.

C. Testing the Chief Forms of Investment

(Advantages and disadvantages of different investments)

In the table on the next page our seven cardinal tests are applied to the seven forms of investment. The table shows that no one kind of investment is ideal, although each has its advantages along with its disadvantages.

Savings accounts. — The savings account has a high degree of safety, ordinarily can be quickly converted into cash, and requires little or no attention from the investor. Its chief disadvantages are the low interest returns, the fact that there is no chance for appreciation of the principal, and the lack of incentive to save systematically.

The savings account is a good investment for one who desires to save for a short time, say a year or less. His funds will be safe, interest will begin almost at once, and he can withdraw his money when he needs it. Likewise for one who is saving toward a particular objective, such as the purchase of a bond or a piece of real estate. Wage earners subject to irregular employment should use it in times of plenty as a place to store funds against the " lean " times to follow.

Building and loan shares. — An investment in building and loan shares yields a good return, is quite safe, can be quickly turned into cash, involves no worry, and through the plan of weekly or monthly payments offers a strong incentive to save. If one is to obtain the full interest on his investment, however, it is necessary for him to keep up his payments until the shares are fully paid for, a period of over six years in the associations using the plan of 25 cents a week payment on $100 shares (see pages 233–234). Another disadvantage is that no appreciation of the principal is possible.

All things considered, however, the shares of building and loan associations constitute a well-nigh ideal investment for

How the Different Investments Respond to Tests

	DEPOSIT IN SAVINGS BANK	SHARES IN BUILDING AND LOAN	PURCHASE OF REAL ESTATE	MORTGAGE LOANS	LIFE INSURANCE	ESTATE IN TRUST	STOCKS AND BONDS	REMARKS
INTEREST YIELD	3 to 4%	Approximately 6% (If held to maturity)	Probably averages 6%	Typically 5 to 6%	About 3%	About 4%	From zero up; on "good" securities 4 to 6%	Advantage with building and loan, real estate, mortgage loans, and securities
SAFETY OF PRINCIPAL	High	Very high	If insured and wisely located comparatively secure	Conservative loans secure	Practically perfect in standard companies	Depends on ability of trustee	If carefully selected — very satisfactory	Advantage with building and loan, life insurance, and sound bonds
MARKETABILITY OR LIQUIDITY	Ordinarily can be cashed immediately	Same as savings bank	Slow	Poor	Cash surrender value available in a few days	Depends on nature of the estate	Varies. Some have quick market, some slow, some none at all.	Advantage with banks, building and loan, insurance, and active securities
CHANCE FOR APPRECIATION	None	None	In growing communities good	None	None for the average person. In case of one dying prematurely — some	Depends on character of estate and ability of trustee	If wisely selected — good. If poorly selected — depreciation likely	Advantage with well selected real estate and sound securities
VALUE AS COLLATERAL	Most savings banks will lend on security of savings deposits	Same as savings bank	Good	Poor	Excellent, if policy carries loan contract	Depends on estate and trust agreement	If listed — good. If unlisted — poor.	Advantage with banks, building and loan, insurance and listed securities
ATTENTION NEEDED TO THE INVESTMENT	None	None	Considerable	Little, on conservative loans	None	None if trustee given full charge	Considerable	Advantage with banks, building and loan, insurance, and trust estates
INCENTIVE TO SAVE	Not strong	Strong	In most cases not strong	Weak	Fairly strong	Weak	Not strong	Advantage with building and loan, and insurance

those who will lay aside a definite sum weekly or monthly, and who do not care to bother with investment problems. Investors will look in vain for anything better, considering factors of yield, safety, marketability, collateral value, freedom from care, and incentive to systematic saving. If these associations were commercial enterprises operating for profits, they would undoubtedly advertise their advantages more widely. As it is, they operate for their members, on the coöperative plan, rather modestly and quietly.

Real estate. — Real estate is not readily marketable, sometimes gives the owner a good deal of worry, and offers little incentive to save systematically. Ordinarily money can be borrowed on it by giving a mortgage; if well located it has a good chance for appreciation, the principal invested is safe, and the returns fairly high.

The purchase of real estate involves much more than renting out one's money to a savings bank or building and loan society. In the field of real estate one must exercise judgment, know something of the trends of public taste in housing or business property, and be prepared to experience some exasperating situations. The purchase of real estate for one's own home is to be encouraged, however, as one of the best incentives to good citizenship, and when it is effected through a building and loan association or any other device for monthly payments, it likewise becomes an incentive to systematic saving.

Mortgage loan. — If a mortgage loan is made carefully, with due regard to present and probable future values of the property, it is safe, yields a good return, and occasions little worry. If a separate loan is made by one individual, it is difficult to turn into cash or to borrow money on, and it provides no incentive to save regularly. If the loan is in the form of real-estate mortgage bonds issued by a reputable

house (see pages 251–255), some of these drawbacks disappear; for the bond house may arrange to lend on the security of the bonds as collateral, and may offer a plan of monthly payments for the convenience of the purchaser. Much depends, therefore, on the form of the mortgage loan.

Such loans are well adapted to those who desire to place their savings in real estate but who prefer that others own and manage the real estate.

Life insurance. — A life-insurance policy with a standard company is a fairly safe investment, although the interest yield is low. Something akin to marketability is found in the provision that the company will return a certain amount of cash in case the policy is surrendered. Most policies also carry a provision by which the company offers to lend a certain amount of cash to the holder, using the policy as collateral. The fact that insurance requires no attention on the part of the investor is another advantage. The chief disadvantages, in addition to the low yield, are the absence of any chance for appreciation and the failure to develop the habit of systematic saving, through having the premiums paid only once or a few times a year. True, in case of premature death the beneficiary receives more than was paid in by the policy holder, but most insured persons would rather not have that kind of appreciation.

After all, few persons buy life insurance purely as an investment. Most persons buy it for the protection it affords. But after one has bought it for protection, he may be agreeably surprised to find how many of the qualities of a good investment he has.

Estate in trust. — Placing an estate in trust is a form of investment that is difficult to analyze. So much depends on the form of the estate, the nature of the trust agreement, and the efficiency of the trustee. If, for example, the estate

consists of land and buildings, there may be a good chance for appreciation in value, whereas if it consists of mortgages there is no chance for appreciation. If the trust agreement authorizes the trustee to use his own judgment in making investments, he may obtain a good yield, combined with safety and marketability; if the agreement narrowly restricts the trustee, these advantages may be lost. If the trustee is careless or incompetent, the investment will probably prove to be poor, whereas an able trustee might make the investment an advantageous one. The trustor, by conferring full authority on the trustee, may relieve himself of all worries regarding his estate, but he may then worry regarding his choice of a trustee.

Committing one's estate to a trustee is of doubtful wisdom for a person in sound health and mentality who desires to make the best investments possible. Such a person can, ordinarily, do better by managing his own investments. Then, too, for a person saving moderate sums, the trust estate is not, on the whole, well adapted. Unless the estate is of considerable size, competent trust companies do not care to bother with it; any other kind of trustee will probably prove costly, if not dangerous.

Stocks and bonds. — The fact that stocks and bonds vary all the way from worthless to " gilt-edged " makes it impossible to lay down any definite investment principles regarding them. Not only does their yield vary markedly, but their safety does likewise. If listed on a stock exchange (see page 397) and traded in actively, they possess excellent marketability and good collateral value. Stocks, especially, are prone to fluctuate in value, bringing gains and losses, and demanding a good deal of attention if the gains are to outweigh the losses. Usually, securities are sold outright; in that event they offer no incentive to systematic saving. When

sold on the monthly payment plan their purchase may develop a habit of saving.

Stocks and bonds are destined to become more and more important as avenues of investment, due to the fact that corporations are steadily expanding, both in numbers and in size. The capital needed by our growing corporations will be supplied in part by the wealthy class, but to a considerable extent by the masses, since the masses are saving considerable sums and will be forced more and more to find an outlet for their savings in corporate securities. Some of the savings of the masses will pass to the corporations indirectly, through such institutions as savings banks and insurance companies. Some, probably an increasing portion, will pass directly, through the purchase of stocks and bonds by the savers themselves. Evidence that our corporations recognize this development is seen in the fact that some of them are offering their shares of stock on easy terms to their own employees. Other corporations, especially electric light and power companies, are selling stock to their own customers. Bond houses, too, are extending their sales among persons of moderate incomes. As more and more of our people become investors in stocks and bonds it will become of increasing importance that they be able to discriminate between the good and the bad. There will always be opportunities to purchase securities which look good but are really bad. Investors must learn that their protection lies either in dealing only with trustworthy houses, or in thoroughly educating themselves in the selection of sound securities.

Summary. — The investment of one's personal savings should be carried out only after one has analyzed his own needs. Probably no two individuals ever find themselves in *exactly* the same financial position, nor is the position of one individual the same at forty years of age as at twenty.

Accordingly, each individual should frame his own investment program, revising it from time to time as conditions change. Fortunately, there is in society a rather wide variety of investment opportunities, so that practically every need can be served. By means of tests the fitness of different forms of investment can be determined. Each form of investment has its advantages and disadvantages. The investor's task, therefore, is to select those forms of investment that combine the most advantages with the fewest disadvantages — to himself.

QUESTIONS

1. Why should not Brown purchase bonds merely because he learns that Black, in whom he has confidence, has done so? Why might bonds be quite unsuited to Brown?

2. Prove that there is no such thing as *absolute* safety in an investment. Why are Baltimore municipal bonds safer, as a rule, than the bonds of a steel manufacturing company?

3. What does the following table show as to the relative safety of certain forms of investment?

Percentage of Loss to Total Resources

	1921	*1922*	*1923*	*1924*
Building and loan assoc. .	.0032	.0047	.0030	.0084
Savings banks	.0410	.0280	.0640	.1260
Loan and trust co. . . .	.8010	.2070	.0290	.2310
State commercial banks .	.1750	.5590	.3800	1.2930
Private banks	1.6790	1.6170	1.3520	3.6280

(H. F. Cellarius in *World's Work* 50: 445, August, 1925)

4. A man paid $8,500 for a house and lot which he rented to a certain family for $70 per month. The upkeep of the house, including repairs, taxes, and depreciation, averaged $270 a year. What was the net yield on his investment?

5. In a certain western city the average yield on real-estate investments was found to be 6.8 per cent; on savings deposits, 4 per cent; on building and loan shares, 6.1 per cent. Account for the difference in yield. Why should any one use the savings deposit when the other investments pay so much more?

6. A stenographer who had saved $1,000 asked her banker what investment he would recommend. She told him she did not want to take any chances of losing her money. He recommended a United States government bond. She purchased it for $1,045, obtaining $40 a year interest. What was the yield? What relation had the low yield to the fact that she did not want to take any chance of loss?

7. Did the government bond, purchased in the preceding question, possess good or poor marketability? How do you know? Show how its marketability might help explain its low yield.

8. Did the government bond have any chance for appreciation? for depreciation? What might bring about appreciation or depreciation in such bonds? Would the government bond have as much chance for appreciation as a house and lot? as a mortgage loan on a house and lot? as a savings bank deposit? Why in each case?

9. "If a person puts chance for appreciation far ahead of all other tests, he is likely to become a speculator rather than an investor." Show that this is true.

10. Did the government bond in Question 6 possess high or low value as collateral? Show the relation between the marketability of this bond and its collateral value. Find out from a banker how much he would lend on the security of a $1,000 government bond. Find how much he would lend on a $1,000 farm-mortgage note. Account for the difference in the two cases.

11. Did the government bond require much attention to the investment or did it give freedom from care? Why? Prove that, in general, investments having much chance for appreciation involve much care, while those having slight chance for appreciation give freedom from care. Illustrate by oil stocks, life-insurance policies, savings-bank deposits, and real estate.

12. Mention several types of persons who want freedom from care in investments. Mention several types who enjoy looking after their investments, particularly if they can increase the yield on their investments by so doing.

13. What is meant by the "habit of saving"? How is it developed?

Is it formed largely in childhood or in adulthood? How can financial institutions promote the habit of saving?

14. Real-estate firms sometimes advertise to sell houses on easy terms, the buyer to "pay like rent." Why do they do this? Can they sell on these terms for the same price as if the buyer paid cash in full? Why? If not, does the buyer necessarily make a poor investment if he "pays like rent"? Why?

15. Insurance agents usually urge spendthrifts to take out heavy life insurance, especially emphasizing the endowment policy as a good investment (see page 322). Why is the endowment policy suited to a spendthrift? Point out several disadvantages of endowment insurance as an investment.

16. A successful financier once gave this advice, "Don't put all your eggs in one basket!" Another advised, "Put all your eggs in one basket and then watch that basket!" With which do you agree? Give your reasons.

17. Do banks usually put all their eggs in one basket when making loans? (See page 363.) If an individual has only $1,000 to invest, show why he cannot conveniently follow the same policy as a bank in diversifying loans. If he had $100,000 to lend, should he diversify? Why? How could he diversify?

18. The American people save, on the average, about 15 per cent of their income. Do the rich probably save more or less than the average? Why? How do the savings of yourself or your family compare with this average?

19. "It is probably wise for one who is just starting to invest to use the savings bank, the building and loan association, or some other form in which experts invest his money for him. After awhile, as he studies investments and gains experience, he should become his own investment expert, placing his money in such forms as real estate, stocks, and bonds." Do you think this is sound advice for most investors? Why? Show that it would not be sound for every investor.

20. "We are certain to become more and more a nation of investors in stocks and bonds." On what is this prediction based? Does it mean that other forms of investment, such as life insurance and real estate, will decline in the amounts invested in them? What does it mean with respect to the growth of bond houses and of salesmanship of securities in the future? What does it mean with respect to the education of our citizenship in financial affairs, especially corporation finance?

TOPICS FOR FURTHER STUDY

THE INVESTMENT OF PERSONAL SAVINGS:

Jordan, *Investments*, Revised Edition.
Jones, *Investment.*
Kirshman, *Principles of Investment.*
Badger, *Investment Principles and Practices.*

PART V

DOES THE SYSTEM WORK BENEFICIALLY?

PURPOSES OF PART V

1. To Examine Some of the Weaknesses in our Financial System
2. To Consider Some Remedies Proposed for Those Weaknesses
3. To Discover the Direction in Which Our Financial System Is Developing

CHAPTER HEADINGS OF PART V

Chapter XXIII. The Instability of Money
Chapter XXIV. The Growing Power of Finance

A woman stood at the desk of a banker in 1920. She had just sold a $1,000 bond, which she had purchased in 1915. During the five years the cost of living had risen 100 per cent. She had saved and invested $1,000 in 1915, but when the $1,000 was returned to her in 1920, it had a purchasing power of only $500. The war-time rise in prices had confiscated one half of her savings.

Does an increase in prices of goods affect any other classes in society besides savers? Did any one gain the $500 in purchasing power lost by the woman? When the cost of living falls, who gains and who loses? Why does the cost of living change? Can anything be done about it?

"You had better discuss that proposition with your banker. It sounds all right to me, but I'm a poor judge of business ventures. If your plan has any flaws in it, Cashier Hansen will probably see them. If it is sound, he can help you finance it. So, whether it's bad or good, you should consult him."

Why does the banker have the final word to say on so many business propositions in society? Is his power increasing or diminishing? Are his decisions based on whim, or on personal likes and dislikes, or on broad principles beyond his control?

CHAPTER XXIII

THE INSTABILITY OF MONEY

A. How We Measure the Instability of Money
B. Who Are Affected by Price Changes
C. Proposals to Stabilize Money

We have been examining the working of our financial system. We have seen (Part I) how money came to be, and how gold superseded all other materials as the standard; how the different coins and paper money used in the United States are issued and secured; and what the important uses of money are in modern life. Then, to show how money aids in gratifying our wants, we sketched the uses of money in a business enterprise (Part II). The work done by financial instruments, such as stocks, bonds, drafts, and promissory notes, was pictured (Part III), while the various institutions handling money and financial instruments were described in Part IV. We are now ready to make a critical appraisal of the system, considering some of the weaknesses in it. We cannot, of course, take up every criticism that has ever been advanced against the system. We can only consider several that are generally regarded as main weaknesses:

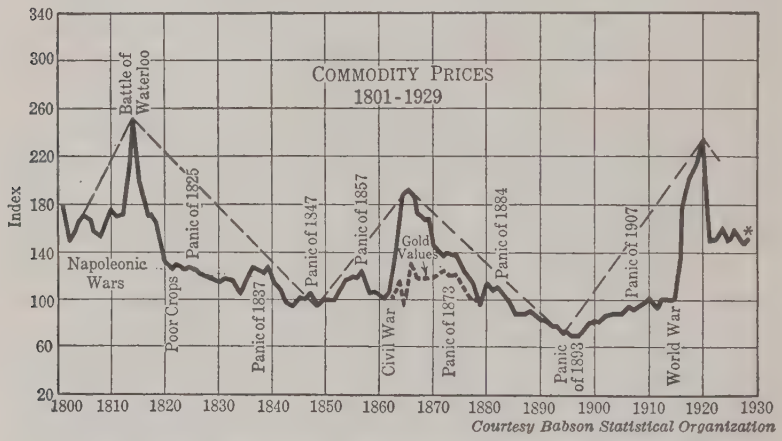
1. That money is unstable in purchasing power — discussed in this chapter.

2. That finance is gaining a dangerous power in modern society — discussed in the final chapter.

Taking up the first criticism, that money is unstable in purchasing power, we need to inquire what is meant by un-

stable purchasing power, how we measure such instability, who are affected by it, and what proposals have been made to correct it.

The meaning of unstable money. — By unstable money we mean money whose purchasing power varies from time to time. If at one time I am able to fill my market basket for $10, while at another time it takes only $5 to fill my basket



THE DASH LINES SHOW THE LONG-RUN TREND OF PRICES

with the same groceries, I know that money has more purchasing power at the later time than it had at the earlier. We say that money " goes farther " when goods are cheaper. That is, when prices of goods are low, money has more purchasing power than when prices of goods are high. Low prices — high purchasing power of money; high prices — low purchasing power of money. This is sometimes stated in the form of a rule, or economic law: *Prices of goods and the purchasing power of money vary inversely.* When the one is high, the other is low; when the one is rising, the other is falling.

In our discussion of paper money we saw that when large quantities of paper money are issued, prices of goods rise (see pages 55–60). Each unit of paper money has less purchasing power when a great many units are being added to circulation. It is also true that gold money changes in purchasing power from time to time. That is, prices of goods expressed in gold vary from time to time. The accompanying chart shows how prices have varied over a period of one hundred and twenty-eight years. During the greater part of this period prices are measured in gold. (During and after the Civil War, 1861–1879, the chart shows both paper-money prices and gold-money prices.) The chart indicates that prices move in sweeping, wave-like fashion, an upward movement being followed by a downward one. This wave-like movement holds true both for the long-run changes (indicated by the dash lines) and for the short-run changes. Each change in commodity prices means, of course, a reverse change in the purchasing power of money. A rise in prices, such as occurred from 1802 to 1815, meant a fall in the purchasing power of money. The fall in prices during the thirty years, 1865 to 1895, meant a rise in the purchasing power of money during those years.

A. How We Measure the Instability of Money

(Index numbers — how made; computing the value of the dollar)

As the chart suggests, we measure the instability in the purchasing power of money by changes in commodity prices. But how do we measure changes in commodity prices? How do we know whether prices, *on the average*, are rising or falling when the price of some goods is rising, of other goods is falling, and of still other goods is remaining the same? And how may we compare changes in the price of coal (measured by

the ton) with those of wheat (measured by the bushel) or with those of beef steak (measured by the pound)?

By index numbers we measure changes in the price level. — Obviously, in order to find whether the average price of many different commodities is rising or falling, it is desirable to bring the different commodity prices to some common denominator. This is done by a system of index numbers. The commonest form of index number is simply a percentage, based on the price prevailing at some starting point. For example, if we take the price of wheat January 1, 1900, as a starting point and find that it is $1.00 per bushel, we would call that price 100 per cent. Then if we find that the price of wheat at a later time, say July 1, 1910, is $1.30 per bushel, we know that its index number at that time is 130, for the 1910 price is 130 per cent of the original price. If wheat is $2.40 per bushel in 1920, its index number for 1920 would be 240; if wheat sells to-day for $1.65 per bushel, its index number is 165, based on the original 1900 price. We could take, similarly, the price of coal, measured by the ton, beefsteak, by the pound, and other commodities, measured by their respective units, and express their prices as a percentage of their starting price. Then to find whether the average of all these commodities had risen or fallen and how much, we would average the index numbers of the separate commodities. The accompanying table (page 445) illustrates a simple set of index numbers built on six commodities, with January 1, 1900, used as a base, or starting point.

How much, in the table opposite, has the purchasing power of money changed as average prices have changed? At first glance one would say if prices have risen 24 per cent, the value of the dollar must have fallen 24 per cent. But obviously this cannot be true, for if prices have risen 100 per cent, the value of the dollar could not have fallen 100 per

Example of Simple Index Numbers

	Base price Jan. 1, 1900	*Index number Jan. 1, 1900*	*If price Jan. 1, 1913, is*	*The index number for that commodity for 1913 is*	*If price Jan. 1, 1920, is*	*The index number for 1920 based on 1900 is*	*If price Jan. 1, 1930, is*	*Index number for 1930 is*
Wheat	$ 1.00 per bu.	100	$ 1.40	140	$ 2.10	210	$ 1.65	165
Cotton	.08 per lb.	100	.10	125	.20	250	.16	200
Round steak	.20 per lb.	100	.25	125	.30	150	.28	140
Crude rubber	.50 per lb.	100	.60	120	.70	140	.15	30
Steel billets	16.00 per ton	100	18.00	112	40.00	250	32.00	200
Bituminous coal	2.50 per ton	100	3.00	120	5.00	200	3.00	120
		6)600		6)742		6)1200		6)855
		100		124 = Average for 1913. Increase of 24% over 1900		200 = Average for 1920. Increase of 100% over 1900.		143 = Average for 1930. Increase of 43% over 1900.

This shows that for our six commodities there was an average increase of price in 1913 over 1900, in 1920 over both 1900 and 1913, and in 1930 an increase over 1900 but a decrease as compared with 1920.

cent, since this would mean that the dollar was worth nothing at all. In 1913, by our table, average prices had increased 24 per cent. Then the dollar would purchase $\frac{100}{124}$ as much as it would have purchased in 1900. This fraction, $\frac{100}{124}$, is 81 per cent, which means that the 1913 dollar is worth 81 cents as compared with the 1900 dollar; or that it has lost 19 per cent in value. Likewise in 1920 since average prices had increased 100 per cent, the 1920 dollar would buy $\frac{100}{200}$ or 50 per cent as much as the 1900 dollar would buy. The fall in prices between 1920 and 1930 raised the purchasing power of the dollar, but left the 1930 dollar less valuable than the 1900 dollar.

If, instead of taking six commodities, we had taken several hundred, we would have a more accurate picture of the true course of prices. The chart on page 442 was made by averaging the index numbers of a large group of commodities — 1913, the year before the World War began, used as a base. This involved, of course, an investigation of the price prevailing on these commodities each year from 1801 to 1929, then an expression of these prices as a percentage of the 1913 price. Some index numbers are made by groups of commodities, while others are made by taking retail prices rather than wholesale prices.

B. Who Are Affected by Price Changes

(Debtors and creditors; laborers and salaried people; business enterprisers)

Prices and money incomes may not move together. — The fact that prices move up and down is of considerable importance to most members of society. If, when prices are rising, every one's money income rose in proportion to the rise in prices, no one would be harmed or benefited. If, when prices are falling, every one's income fell in proportion, we should all be as well off as before. But if, when prices are

rising, Smith's money income is remaining the same, he finds that he is really falling behind. He cannot purchase as many goods as he could formerly. The same result occurs when prices of goods and Smith's money income are both rising but at different rates. If prices are rising at the rate of 5 per cent a year while Smith's income is rising at the rate of 2 per cent a year, he is still falling behind. The reverse, of course, may also occur. Prices may fall but money income remain the same, or fall less rapidly than prices. Then Smith is better off than before. What usually happens is that when prices are rising some persons' incomes are rising even more rapidly than prices, other persons' incomes are rising at about the same rate as prices, while still other persons' incomes are rising very slowly, or not at all, or are even falling. Conversely, when prices are falling, some incomes are rising, some remaining the same, some falling. Evidently prices of goods and money incomes do not necessarily move together. This is due to the fact that prices of goods are governed primarily by the demand for, and the supply of, goods, while an individual's income is governed primarily by the demand for his services and by the supply of workers capable of performing the same services as he. Clearly, therefore, an individual's money income may or may not change with a change in prices. While every person in society is affected, more or less vitally, by these changes in prices and in incomes, certain classes are especially affected. These classes are the debtor and creditor classes, the laboring and salaried people, and business executives.

Debtors and creditors are affected by rising and falling prices. — The incident of the German professor, told on page 2, illustrates vividly the effects of the changing value of money on a debtor and a creditor. The professor loaned 8,000 gold marks in 1912 when prices and incomes were on a

gold basis. The debtor paid back the loan to the professor in 1922 when prices were on a paper money basis, which meant a very much higher level than when the loan was made. He paid back, of course, 8,000 paper marks, which had a purchasing power of about $\frac{1}{100}$ as much as he borrowed. The professor lost $\frac{99}{100}$ of his savings through the great rise in prices (or fall in the value of money) which had occurred. The heavy issues of paper money by the German Government had forced prices of goods upward, or, what amounts to the same thing, had forced the purchasing power of money downward, with the result that the debtor got off by paying almost nothing in real purchasing power, whereas the creditor was severely penalized by being paid back in almost worthless paper money. Evidently rising prices make it easier for debtors to pay. They need not work so many days or sell so much goods to obtain a given sum of money as when prices are lower. Conversely, rising prices injure creditors because they are paid back in money that has less purchasing power than the money they loaned.

But we need not go to Germany for an illustration. We have had periods of rising and falling prices in our own country, even when we were on the gold standard. For example, in 1920 prices were high. According to the chart on page 442, average prices were about 230 per cent of 1913 prices, that is they were over twice as high as in 1913. In 1920 Dee bought an Iowa farm for $260 per acre, paying down $60 per acre in cash, and giving first and second mortgages for the remaining $200 per acre. The first mortgage bore 6 per cent interest, while the second mortgage bore 8 per cent. His interest charges amounted to $14 per acre, while taxes and other expenses of the farm added considerably to the burden. If the price of corn, oats, and other products of the farm had remained high, he would have had little difficulty meeting

his expenses. But in 1921 prices fell rapidly. Dee found it impossible to obtain enough from the sale of his crops to pay the $14 an acre interest charges on his mortgages. He therefore requested more time to pay. But 1922 was little, if any, better, since prices still remained much below the 1920 level (see chart, page 442). Again he had to request a postponement of the interest payments. When 1923 and 1924 brought no relief Dee faced a serious financial crisis. His unpaid mortgage interest meant that his creditors could foreclose, under the terms of the mortgages, and take his farm from him. He knew that if the farm were put up for sale, it would bring much less than he paid for it, because he realized that the value of farm land depended chiefly on the value of the products raised on the farm. Since these products had fallen in price after 1920, he realized that the land, too, had fallen in price. The blow came in 1925, when the farm had to be sold, bringing only $180 per acre, wiping out all of Dee's investment and causing, in addition, some loss to the holder of the second mortgage. The fall in prices had bankrupted the debtor, Dee.

Dee's neighbor, Nichols, had a somewhat similar, but not so disastrous, experience. Nichols had borrowed $2,000 in 1919 to purchase a tractor and make certain other improvements on his farm. At that time wheat was selling in Nichols's home town for $2.00 per bushel. Accordingly, he borrowed the equivalent in money of 1,000 bushels of wheat. When the loan came due several years later, wheat was selling in Nichols's town for $1.25 per bushel. In paying back $2,000, therefore, Nichols had to raise and deliver 1,600 bushels of wheat. The burden of his debt was increased 60 per cent by the fall in prices. Falling prices mean, therefore, an increased burden upon debtors, while creditors collect, in purchasing power, more than they loaned.

At first thought, most persons are inclined to sympathize with the debtor class, believing they are financially worse off than creditors. This may be an error. While the debtor class does include many struggling farmers and small merchants, it also includes many wealthy business men and large corporations, since they are typically borrowers of money. The creditor class includes not only the rich but also the multitude in humble circumstances who have saved small amounts and now own a bond, a life insurance policy, or perchance simply a savings account in the bank. The fact is that a large proportion of our people are both debtors and creditors at the same time.

Changing prices affect the salaried and laboring classes. — Rising or falling prices, especially if the change is a rapid one, affect seriously the salaried and wage-earning classes. This may be shown by the experience of a certain teacher, who was employed by the Board of Education in a southwestern city in 1915. This young woman, who was supporting her mother, was elected to a position paying $1,200 per year, the salary to increase $100 every second year until a maximum of $2,000 was reached. In 1916 prices of goods began to rise (see chart, page 442), but her salary remained the same. In 1917 her salary was $1,300, but the increase in prices was even greater than her increase in salary, so that she had considerable difficulty meeting expenses. By 1918 the cost of living mounted still higher, with no increase at all in salary. It became necessary, therefore, for her and her mother to lower their standard of living. They moved into a cheaper apartment and economized also on food, clothing, and recreation. The years 1919 and 1920 brought further hardships with continued rising prices and only a small increase in salary. The situation in 1920 was indeed so serious that the Board of Education voted a bonus of $100 to each teacher, to help tide over

the difficulty and to prevent many of them from resigning. In 1921 the whole situation changed for the better. Prices began to fall, while the salary schedule remained in effect. By 1924 this teacher found that she had recovered approximately the financial position she had in 1915. By 1927 she had gained a *real* increase in her income, something she had expected to gain from salary increases 10 years earlier. The rise in prices, 1915 to 1920, had not only wiped out all hope of bettering her condition, but had also made her actually worse off than when she started. The fall in prices, 1921 to 1927, combined with her gradually increasing salary, had first restored and then improved her status.

The experience of the teacher is the experience of most persons who live on a salary or who work for wages. When prices are rising, wages and salaries, as a rule, do not rise as rapidly, thereby making living more difficult. When prices are falling, wages and salaries do not fall as rapidly, thereby easing the strain. Wages and salaries tend to lag behind changes in prices because they are not a matter of daily, or even weekly, bargaining, as are most commodities. Accordingly, changes come slowly. When prices, especially of the necessities of life, are rising, with incomes lagging behind, we often hear complaints of the high cost of living. Labor troubles, such as strikes for higher wages, become common. At such times some employers voluntarily raise wages and salaries, or give bonuses. Even so, incomes seldom keep pace with the cost of living, especially if the price rise is rapid.

When prices are falling, salaried and wage-earning persons usually gain. The chief difficulty in this period is unemployment. When prices are falling, business concerns may restrict their output, hoping thereby to avoid losses from selling goods on a falling market. Restricting output may mean unemployment, or only part-time employment, for workers.

This in turn may cause actual wages received to decline even faster than prices. Generally, however, salaried and wage-earning persons gain in periods of falling prices.

Business executives face added risks when prices are changing. — As suggested in the preceding paragraph, falling prices may cause a partial or complete shut-down of an industry. The executives in charge may hesitate or even refuse to produce goods for sale on a falling market. This is more likely to happen when prices are falling rapidly than when they are falling slowly, for rapidly falling prices almost certainly involve loss to producers, whereas slowly falling prices may give producers time to adjust their plans to the change, thereby permitting production to be continued.

Rising prices may also introduce serious risks to a business enterprise, by raising the cost of production. A contractor, for example, has bid on the construction of a new building, basing his estimates on present prices of lumber, brick, and other materials. His bid is accepted and he gives bond to complete the building for the sum specified. If the prices of building materials rise before he has purchased what he needs, he may face a serious loss on the entire job. Similarly, rising prices may mean loss to railroads and other public utility enterprises, since their rates, or selling prices, are controlled by law, but the prices of the goods they buy are subject to market fluctuations. Rising prices of coal and other materials may turn the year's business into a loss, just as falling prices of these materials may bring the business unexpected profits. Some executives planning to build new plants or buy new equipment will not do so when prices are rising rapidly, for fear the cost will be greater than the new business will justify. Neither will they build or buy on a rapidly falling market for fear they could build or buy much cheaper if they waited. Unstable prices disturb business plans. Stable prices pro-

mote business confidence. In this respect the welfare of business agrees with the welfare of salaried and wage-earning persons, and with the welfare of debtors and creditors, all of whom we have found to be injured by rapidly changing prices and to be benefited by stable prices.

C. Proposals to Stabilize Money

(Requiring debtors to pay back equal purchasing power; varying the weight of the gold dollar; controlling credit through the banking system; stabilizing prices of individual commodities)

The difficulties introduced into modern life by unstable prices have led economists to bring forth a number of plans to stabilize prices. Some of these plans propose to attack the problem from the side of commodities, believing that by stabilizing the price of various important basic commodities, prices in general could be stabilized. Others of these plans propose to attack the problem from the side of money, believing that stable purchasing power of money, which means stable prices, can be obtained by working on the demand and supply of money. Before taking up several of these proposals, it may be well to consider a suggestion of a somewhat different, although related, character.

The proposal to require debtors to pay back an equivalent in purchasing power has been advanced. — We have seen that one of the most serious evils connected with unstable purchasing power of money is that debtors may pay back less or more in purchasing power than they borrowed, depending upon whether prices have fallen or risen since the debt was contracted. To remedy this evil the proposal has been made that the law require a debtor to pay back an equivalent in purchasing power when his obligation falls due. For example, if official index numbers showed that average prices doubled between 1910 and 1930, then the man who borrowed $1,000

in 1910 should pay back $2,000 if his debt fell due in 1930, since that would mean paying back in purchasing power an equivalent of what he borrowed. Likewise, if average prices fell 40 per cent between 1920 and 1928, a debt of $5,000 contracted in 1920 would be paid with $3,000, if it fell due in 1928.

While the proposal seems to be fair to both debtors and creditors, it runs into several serious difficulties. One is that debtors would never know until the end of the period of indebtedness just how much they would be required to pay. It would be difficult, for instance, for a corporation, which had issued twenty-five-year bonds in 1925, to lay aside every year a definite sinking fund to pay off the bonds in 1950, since it would not know until 1950 how many dollars would be needed. For this reason the plan would introduce another uncertainty into business operations. Another objection is that our index numbers are not yet perfected sufficiently to tell us *accurately* what is happening to the price level. Some index numbers are based on wholesale prices, others on retail prices. Some are made up chiefly of raw materials, others of manufactured goods. These various sets of index numbers do not always agree. Indeed, at certain times some have shown an increase in average prices while others were showing a decrease. Obviously, it would be necessary to develop a more reliable system of index numbers before the proposal could be operated satisfactorily.

The business world is so adjusted to the plan of paying a fixed number of dollars when debts are talked of, that any other plan would have to be preceded by a long campaign of education before it would be seriously considered. Of course, the object in view could be accomplished if the price level were to remain stable, for in that event the debtor would be paying back an equivalent in purchasing power when he paid back the same number of dollars he borrowed. We

may turn, therefore, to a consideration of several proposals to stabilize the price level. As noted before, some proposals attack the problem from the side of money, others from the side of goods.

Varying the weight of the gold dollar has been proposed as a method of stabilizing prices. — One of the proposals to stabilize prices by working on money suggests that we change the weight of our gold dollar from time to time. The argument runs somewhat as follows:

The more dollars in circulation, the less purchasing power each dollar will have; the fewer dollars in circulation, the more purchasing power each will have. If we desire to raise the purchasing power of the dollar, we should lessen the number in circulation; if we desire to lower the purchasing power, we should increase the number in circulation. Therefore, when prices of goods are rising (or the purchasing power of dollars is falling), the number of dollars in circulation should be decreased so as to stop the rise in prices and raise the purchasing power of the dollar. Conversely, when the price level is falling (or money increasing in purchasing power), the number of dollars should be increased, thereby stopping the fall in prices. The way to increase or decrease the number of dollars is by changing the weight of the gold dollar. The gold dollar at present contains 23.22 grains of pure gold. By increasing the number of grains in a dollar, the existing supply of gold money would make fewer dollars. By decreasing the weight, more dollars could be made. Since the supply of paper money and even of bank deposits is based upon gold money, a change in the supply of gold money, it is contended, would mean a similar change in other forms of purchasing power. To avoid the possibility of having gold coins of different weight in circulation at the same time, it is proposed that the actual gold be kept in the Treasury in the form of

bars, and that other forms of money be redeemed in gold bars, not in gold coin.

This proposal has been attacked by its opponents as impracticable and unsound. Among the objections raised to it is the criticism that prices of goods do not depend upon, nor move up and down with, the supply of gold dollars. At times the number of gold dollars has increased, say through imports of gold from abroad, and instead of prices rising as a result of more dollars, prices have remained stable or even fallen. This proves, say the critics, that there must be other factors besides gold money, at work controlling prices. They insist, therefore, that varying the weight and the number of gold dollars would not cause prices to respond.

Another objection is that the gold standard prevails in the principal countries of the world and that the prices of many important commodities, such as wheat, cotton, copper, and oil, are determined by international conditions of supply and demand. Accordingly, say the critics, it would be impossible for one country alone to control its prices by changing the number of units of money within that country while other nations were not attempting to do the same. Since there is no likelihood of the nations coöperating in such a plan, at least in the near future, the outlook for action is not bright.

Stabilizing prices through control of credit by the banking system has been proposed. — Since most of the purchasing power in circulation is in the form of paper currency and bank checks, rather than gold money, the proposal has been made that prices be stabilized by controlling the supply of these forms of purchasing power. When prices are rising, we are urged to lessen the amount of paper money and bank checks in circulation, thereby causing prices to fall again. Conversely, when prices are falling the supply of currency and checks should be increased, so as to cause prices to rise. The

agency to be used in varying the supply of paper currency and checks is the banking system. Since much of the purchasing power in society arises out of bank loans, let the banks decrease loans when prices are rising. By curtailing loans the banks could reduce the amount of purchasing power in circulation, thereby bringing prices downward, is the argument. When prices are falling, on the other hand, let the banks be more liberal in granting loans, increasing the purchasing power in circulation and thereby raising prices. The Federal reserve banks are in an especially strategic position to help carry out this proposal, we are told, since they have considerable influence and power over the local banks. By lending freely and at low rates of interest to member banks they can encourage local banks to lend liberally to the public. By adopting the opposite policy they can influence member banks to restrict loans. Thus the banking system can exercise control over the purchasing power of the country, this in turn exercising control over prices.

The opponents of this proposal deny, among other objections, that the banks of the country can be persuaded or forced to adopt a uniform policy. If a bank is in a position to make loans, and good borrowers are seeking loans, loans will be made regardless of the price level. Another objection is that we have no body of men with sufficient information and wisdom to tell the banks of the entire country just when and how they are to increase or decrease their loans. Others point out that if bankers should refuse borrowers loans when the banks are in a position to make loans, that the bankers would be bitterly condemned and denounced, something no banker cares to experience. Still another objection is that the amount of purchasing power in circulation may not control the prices of goods. Those who advance this objection hold that the prices of commodities are governed by the demand for, and

the supply of, commodities, and that the demand for bank loans results, in large measure, from the prices of commodities rather than being a cause of those prices. If bank loans result from business conditions, these critics insist that we are proceeding the wrong way when we attempt to work on bank loans.

Stabilizing prices by stabilizing demand and supply of goods has been proposed. — Economists who insist that prices of goods are controlled primarily by conditions of demand for, and supply of, the goods themselves believe that stability of prices must come through stabilizing demand and supply. A poor wheat crop, for instance, makes for a high price of wheat. The way to stabilize wheat prices is to stabilize the production and demand for wheat. So with every individual commodity. With farm products stability of production is difficult, for so much depends upon weather. But something can be done through such measures as governmental advice as to what to plant, and coöperative marketing of products. With manufactured goods the supply is now adjusted more or less closely to demand, as the factories increase or decrease their output in response to changing demand. With the increasing use of such measures as advertising to build up a steady demand for one's product, statistical information on which to base forecasts of demand, and improving transportation which lessens the time needed to deliver products and therefore makes possible a closer adjustment of factory output to actual orders received, many business firms are now making steady progress in stabilizing the price of their own products. As more and more commodities come under the influence of price stabilizing methods, we may expect general or average prices to become more stable, is the argument.

Whatever may be the merits and demerits of these various proposals to stabilize prices (or the purchasing power of

money), it is doubtless true that the last discussed proposal is the one that is receiving most attention and trial at present. For the sake of all concerned, especially for debtors and creditors, salaried and wage-earning persons, and business executives, we may hope that price stability will soon become an accomplished fact.

Summary. — Money has been unstable in purchasing power for many years. In war times the instability has been especially marked, but it occurs in peace times as well. We measure the instability of money by changes in average prices of goods, an increase in prices meaning a decrease in the purchasing power of money and vice versa. We get an average of the prices of goods by a system of index numbers. Unstable money affects especially debtors and creditors, by changing the real value of debts, salaried and wage-earning persons, because their incomes frequently do not keep pace with changing prices, and business executives, who find it risky to make plans when prices are changing. To bring justice between debtors and creditors it has been proposed that the law require debtors to pay back not the same number of dollars as was borrowed but an equivalent in purchasing power. To stabilize the price level various suggestions have been offered, including varying the weight of the gold dollar, controlling the amount of purchasing power in circulation by restricting or expanding bank loans, and working to stabilize the prices of individual commodities by stabilizing the supply and demand of commodities.

QUESTIONS

1. Define or explain:
   (*a*) Stable money
   (*b*) Index numbers
   (*c*) Control of credit through bank loans
   (*d*) "Prices and purchasing power of money vary inversely."

2. From the chart on page 442 give two periods during which the trend of prices was decidedly upward, and two in which the trend was downward. What has been the trend since the World War? since the opening of the twentieth century?

3. Suppose you had loaned Gray $1,000 in 1900 for twenty years. When he paid you back would you have gained or lost because of the change in the price level? Approximately how much was the $1,000 in 1920 worth in terms of the original $1,000? (Use chart on page 442.)

4. Suppose your loan to Gray had been made in 1920 for 5 years. How about the facts asked in the preceding question?

5. Some persons who had bought government bonds in 1918, paying par for them, found it necessary to sell them two or three years later at about 90 per cent of par. In the meantime the price level had risen about 20 per cent. Did they gain or lose in purchasing power by the transaction, and approximately how much?

6. If the price level should fall between now and 1940, show what effect it would have on:

(*a*) The stockholders of corporations which suffer diminishing profits because of the falling prices

(*b*) The stockholders of corporations which gain larger profits during the period in question

(*c*) Bondholders who purchased bonds before prices began to fall

(*d*) Owners of real estate for rent or for sale

(*e*) Beneficiaries who receive insurance money during the period.

7. During the World War some industries adjusted the wages of their workers to variations in prices as shown by index numbers. For example, if index numbers showed that average prices had risen 5 per cent, a 5 per cent increase in wages was granted. What can be said for or against such a plan? Should wholesale or retail prices be used in making the index number for such a plan? Give reasons.

8. Most index numbers are weighted, that is, commodities of great importance to society, such as wheat, cotton, and iron, are given more weight in determining the final average than less important commodities, such as flax and zinc. Why would a carefully weighted index number give a more accurate picture of the purchasing power of money than an unweighted one?

9. In 1920 much was heard of "our 40-cent dollar." What was meant by the term? Who were especially affected by the decline in the purchasing power of the dollar?

10. Show why a period of rapidly changing prices is not a favorable

time for carrying on new building construction; for buying a farm; for starting a new business.

11. Of the three proposals to stabilize prices discussed in the chapter, which appeals to you as the most promising? Defend your choice.

12. "At present we have a dollar of fixed weight and varying purchasing power; we need a dollar of varying weight and fixed purchasing power." Discuss.

13. Show the relation between bank loans on the one hand and purchasing power in circulation in the form of checks and paper money on the other hand; between loans of member banks and the policy of Federal reserve banks governing their loans to member banks. What conclusions might be drawn regarding the power of the Federal Reserve System over the price level?

14. What difficulties do you see in the way of stabilizing the price of farm products through working on demand and supply? What for manufactured goods? for real estate? for exported and imported goods? Do you conclude that the attempt to stabilize in this way is entirely hopeless?

15. Summarize the reasons why stability of money is desirable and the chief methods proposed to accomplish that end.

TOPICS FOR FURTHER STUDY

1. Index Numbers and What They Tell:
   Phillips, *Readings in Money and Banking*, chap. VIII.
   Moulton, *Money and Banking*, Part I, pp. 260–266.
   Holdsworth, *Money and Banking*, Fifth Edition, pp. 99–106.
   Kinley, *Money*, chap. XII.
   Magee, *Money and Credit*, chap. XII.

2. The Evils of Unstable Money:
   Holdsworth, *Money and Banking*, Fifth Edition, pp. 106–110.
   Moulton, *Financial Organization*, Revised Edition, pp. 20–35.
   Foster and Catchings, *Money*, chap. V.
   Fisher, *Stabilizing the Dollar*, chap. III.
   Magee, *Money and Credit*, pp. 202–209.

3. Proposals to Stabilize Money:
   Phillips, *Readings in Money and Banking*, chap. XIII.
   Holdsworth, *Money and Banking*, Fifth Edition, pp. 110–120.
   Fisher, *Stabilizing the Dollar*, chap. IV.
   Magee, *Money and Credit*, chap. XXXVIII.

CHAPTER XXIV

THE GROWING POWER OF FINANCE

A. Money and Social Welfare
B. Concentration of Financial Power
C. The Power of Finance over Industry

Another important question regarding our financial system is: How much power has finance over modern life? In discussing this question we want to inquire, first, whether our money and price system promotes the welfare of society; second, whether financial power in America is concentrating in fewer hands; and third, whether finance is gaining an undue power over industry.

A. Money and Social Welfare

(The price system controls our use of resources; money-making and ideals)

Prices and profits determine how resources shall be used. — In Chapter V we saw that the demand for different goods determines what shall be produced; that the spending of money by the public guides business managers in deciding what industries shall be operated (see pages 72–74). Goods for which there is a strong public demand tend to have a profitable price. This tends to draw labor, capital, and managerial talent into those lines of business. This means that we use our natural resources, as well as our human resources, in lines of endeavor that promise to pay a profit. Conversely, our

system tends to avoid the production of those things that do not promise to pay a profit. As far as business is concerned, the dollar rules. Profits attract business energy and resources; losses repel them. Business is not likely to be interested in any project that does not hold out the hope of gain.

Our price and profit system causes much productive energy to be spent in lines that do not promote social welfare. — Since business enterprise tends to avoid the unprofitable and to flow into the profitable, we find much energy being employed in ways that do not help, that may, indeed, harm society. For example, the energy spent in producing, and persuading people to buy harmful drugs, patent medicines, and quack remedies, is financially profitable but is worse than wasted so far as social welfare is concerned. Much of the enormous business of advertising is not to educate and inform the public regarding the uses of products, but is merely to persuade the public to buy one brand of product in preference to another brand of the same product. In many cases the brand most widely advertised does not give the purchaser as much for his money as other brands.[1] It may pay handsomely to fool people.

Not only is energy used in wasteful and harmful ways, but is also used to produce expensive luxuries, while many persons are forced to go without the necessities for decent existence. A wealthy family may have from two to a half-dozen luxurious houses, only one of which it can occupy at a time, while poor people are being forced to live in overcrowded, unsanitary shacks and tenements. Productive energy and resources are used to build for the wealthy, houses not really needed, whereas social welfare demands that better housing for the poor should be provided first. Merely because they

[1] For illustrations see Chase and Schlink, *Your Money's Worth*, Chapters I–VIII.

can afford it, those with plenty of money enjoy luxuries undreamed of by the common man. The poor, lacking money, cannot command resources to be used to satisfy their needs for necessities. In many ways our system fails to " promote the greatest good of the greatest number." In following the wishes of those who have money to spend, it fails, here and there, to promote social welfare.

Better distribution of incomes and higher standards of spending are urged as remedies. — The trouble in our present system lies partly in the fact that incomes are badly distributed in society, some families having much more than they need, others much less ; and partly in the fact that many persons do not know how to spend their money wisely. What is needed, therefore, is a better distribution of incomes in society, and higher standards of spending the incomes we have.

To accomplish better distribution of incomes we need to increase the efficiency of the poorer classes so that they may be worth more to industry, and to increase their bargaining power so that they can obtain more from industry. Better education, legislation to protect wage earners, organization of labor to fight for higher wages, "workers councils," and other devices to promote better understanding between laborers and employers, are some of the means by which those now receiving low incomes may increase them. Improvements in the processes of making and selling goods, especially by the elimination of waste and the invention of more powerful and effective machines, promise to increase the total output of useful things in society and to place them in our hands more cheaply. These improvements may make our existing incomes go farther. Their advantages accrue to all classes, poor as well as rich, although, of course, those who are in a position to profit by the improvements gain more than others.

In order to accomplish higher standards of spending, education is needed. Not only do wealthy persons spend money recklessly and foolishly, causing productive energy to be drawn into "nonessential" lines of industry, but some of those in the poorer classes do likewise. The large sales of useless and frivolous articles, of fake cure-alls, of manifold accessories that contribute nothing to the joy or beauty of life, prove that we are not a nation of careful spenders. Often we do not stop to compare the satisfaction to be derived from one purchase with that of another. Nor do we ask: What will be the effect upon industry, and upon other people, if I spend money for this rather than for that? We usually follow the crowd, or the prevailing styles, rather than a careful consideration of the wisest use to be made of our money. More careful spending would not only increase the sum total of satisfactions derived from our incomes, but would also compel industry to use its energies and resources to supply us with goods that would further social welfare.

Our ideals may be warped by money seeking. — Another criticism made of our financial system is that it exerts too strong an influence over man's ideals. It is frequently said that we are a money-worshipping people. Our great ambition is to make money, since money is the means to many things we desire. Success becomes largely a matter of piling up a fortune. Most communities consider a wealthy person distinguished and successful, even though he has made his fortune by questionable or dishonest means. We seldom inquire how money is made. We seem to think the all-important thing is to make it, in some way or other. And the larger the sum made, the greater the owner becomes in the eyes of his fellow citizens. This attitude tends to encourage many persons to strive for riches, regardless of the welfare of others. It tends to breed selfishness rather than brotherhood,

sharp practices and close dealing rather than sympathy and kindness. The effects of money on social ideals have been well expressed by one writer as follows:[1]

> More and more, and more and more exclusively, and over an ever widening field of human effort, human interests and desires and ambitions fall under the common denominator of money. Doubtless many of the best things in life do not get bought and sold. Some of them are not exchangeable; and not all things that could be transferred are men weak enough to sell or other men strong enough to buy. Not every man has his money price. But most good things do, in greater or less degree, submit to money appraisal. Health is easier for him who can take his ease and who has the wherewithal to pay for good foods and medicine, to travel, to employ good nursing, and to command capable physicians and efficient surgeons. And, in their degree, also, love and pity and respect and place are bought and sold upon the market. It takes a goodly number of dollars to get a child safely born, and even more dollars to achieve for one's self a respectable burial. Much money is power over many things. . . . All economic comparisons are made in money terms, not in terms of subsistence or of beauty or of artistic merit or of moral deserving. This same standard tends to become also the test and measure of human achievement. . . . Is one a great artist — what do his pictures sell for? Or what is the income of this leading advocate? or of that famous singer? How great are the author's royalties? The pecuniary standard tends to be carried over into nonpecuniary fields.
>
> It is almost past belief how far both in degree and in direction money valuations pervade all our thinking. Cheapness is prone to be synonymous with ugliness, richness with beauty, elegance with expensiveness. In the field of morals, also, the so-called cash-register conscience is an actual thing.

This power of money over our thinking is easier to denounce than to remedy. The desire to acquire wealth is not necessarily an evil. Much depends on how the wealth is acquired and what the owner proposes to do with it. If he acquires it honestly, giving to society full value in services, without injuring others or taking advantage of their weak-

[1] Davenport, *Economics of Enterprise*, pp. 22–23.

nesses, most persons would probably say that the wealth is properly deserved. All the better, too, if having honestly earned wealth he uses it in worthy ways, such as fostering learning, or making the world more beautiful, or perchance helping to make life's way easier for others.

The people of the United States are already the richest people in the world. We are becoming richer. The question is: Shall we make wealth our ideal, or shall we use wealth to develop cultural and spiritual things? Shall wealth be the end of our existence, or shall it be the means to an end?

B. Concentration of Financial Power

(Financial concentration accompanies business concentration; saving by the masses adds to financial power)

Another question raised by thoughtful persons regarding the growing power of finance is whether or not financial power is concentrating. Are society's funds assembled and controlled by a relatively small class of financiers? Are financial institutions decreasing in number but increasing in size? Do our larger institutions tend to work together closely? May concentrated financial power prove dangerous to the public welfare?

Saving by the masses increases the power of financiers. — In recent years the increasing wealth of the American people has made possible considerable saving on the part of the masses. Most of these savings pass into industry through financial institutions, as we have seen (page 208). The financiers in charge of these institutions thereby come to control these millions of savings. They decide who shall have the use of this money saved by the people. They stand, as it were, at the door of our financial system furnishing funds to applicants whom they approve, refusing funds to applicants they disapprove. Their decisions are sometimes made merely

on the basis of personal favoritism, but usually on the basis of a credit investigation. But on whatever basis made, it is clear that those who control the money control the development of modern industry, for industry depends on a supply of money for its growth.

Industry and trade are tending to concentrate. — Another form of concentrated financial power is that arising from the shift toward larger business enterprises. In the field of merchandising we have witnessed the rise of large department stores, of mail order houses, and of chain-store systems. In the field of manufacturing we now have huge concerns turning out products valued at hundreds of millions annually, from plants scattered over a dozen states. In transportation our railroads are consolidating into a few great systems. Mining corporations buy out other mining corporations. In practically every line of business, with the possible exception of farming, a decided trend has set in toward large scale operations. Even in farming, the large farm is fairly common.

Business enterprises have grown larger because they have found that more profits are to be obtained by operating on a large scale than on a small scale. A large business can usually affect economies by buying in large quantities, shipping in car-load lots, using specialized workers who become quite proficient at their tasks, making extensive use of labor-saving machinery, and in various other ways reducing their expenses for each unit of product handled. The result is that a steadily growing proportion of the total business in America is being handled by our large concerns.

Large-scale finance has developed. — Along with the rise of large-scale industry and trade, have come large-scale banks, trust companies, life insurance companies, and bond houses. Two forces have been chiefly responsible for this development. In the first place, the same forces producing larger

industrial and trading companies have been at work among financial institutions, namely, the economies of large-scale operation. As a bank, for example, grows in size, its expenses do not ordinarily increase as rapidly as its income. Accordingly, a large bank tends to be more profitable than a small one. Just how large a bank can become until its profits no longer increase, it is impossible to say. Some of our commercial banks have grown until their resources now exceed one billion dollars. And the end is not yet in sight.

In the second place, large-scale financial institutions have developed because they were needed to finance the development of the large industrial enterprises previously mentioned. As industries and railroads expanded, larger stock and bond issues had to be sold, while bank loans often running into the millions were needed. To provide these funds small institutions were inadequate.

Financial institutions have become larger in several different ways. An institution may simply grow larger as the city in which it is located grows in size and wealth. It may grow larger because of consolidations. In 1929, for example, over 1,000 bank consolidations took place. By that year one per cent of the banks had three fourths of all the commercial deposits, leaving one fourth for the remaining 99 per cent. Banks are becoming fewer but larger. What has been happening to the average-sized commercial banks throughout the whole United States in recent years may be seen in the following table, taken from reports of the Comptroller of the Currency:

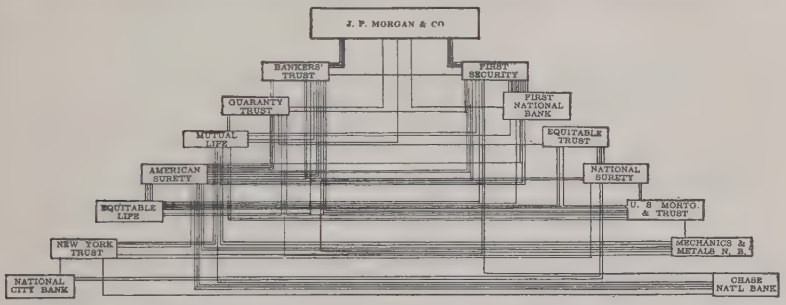
NUMBER AND SIZE OF COMMERCIAL BANKS

	1914	*1921*	*1928*
Total number of banks	26,765	30,812	26,198
Total resources of banks	$26,971,398,000	$49,671,390,000	$71,991,569,000
Average resources per bank . . .	$1,008,000	$1,612,000	$2,748,000

While the number of banks increased about 15 per cent between 1914 and 1921, the resources increased over 60 per cent. Most of this increase in resources was due, however, to the higher price level and greater quantity of money and bank deposits in circulation in 1921. Since 1921, while prices and money have remained fairly stable, the number of banks has actually decreased by over 4,600, while the resources per bank increased 70 per cent. Clearly our banks have been growing rapidly in size, especially in recent years. A similar tendency would probably be found if we had the figures on other institutions, such as bond houses and life-insurance companies.

A concentration of financial power is developing. — As large-scale financial institutions have been developing, another movement has been proceeding, namely, the uniting of financial institutions. We have already noted some of the ways in which financial institutions are effectively united. One way is through department-store banking, the operation of a number of institutions under one roof and one management — a commercial bank, a savings bank, a trust company, and a bond house (see pages 212–214). Another way is through branch banks. In some states banks are permitted to open branches in other communities, a practice tending to concentrate financial power in the state. Somewhat akin to branch banking is chain banking, by which independent banks are bought up and operated by a single corporation. As we have seen, the Federal reserve banks are a device, under government auspices, to tie together the commercial banks of the nation (Chapter XXI). Bond houses are not only in close connection with commercial banks through borrowing from the banks, but are also in close connection with each other through syndicates which are being formed from day to day for the purpose of distributing

securities to the investing public (see pages 274–275). Still another way by which financial power is concentrating is through what is known as *community of interest.* When the same persons are interested in the management of several institutions, a common interest tends to develop among those institutions. They tend to agree on policies and to work together. The connections may be formal or they may be informal. The president of one company may be an officer or director in a number of other companies. Officers in other



Interlocking Directors among Financial Institutions in New York

Each line means one or more directorships. The illustration is to be read only for its general, not for detailed, meaning.

companies may be directors in his company. Sometimes we find Mr. A president of one company, A's son president of another company, and A's brother president of a third company. Community of interest is clearly evident in such cases. Sometimes the relationships are purely informal, certain individuals having understandings and agreements with other individuals, without holding formal positions in the various companies. The above chart shows the community of interest among fifteen large financial institutions in New York in 1920.[1] While the details of the chart would be somewhat

[1] Appendix to Congressional Record, Vol. 60, Part V, page 4629; sixty-sixth Congress, third Session. Speech by the late Senator R. M. La Follette.

different at present, the general situation is the same. These financial institutions clearly have much in common.

In these financial institutions, fifty-six individuals held one hundred twenty-five directorships. Whether or not this is dangerous to the public depends upon how their power is used. Something is said on this later (Section C).

C. The Power of Finance over Industry

(Use and abuse of financial power in promoting, operating, and reorganizing businesses; is there a "money trust"? our growing investments abroad)

The use and abuse of financial power. — We need not pause to elaborate the point that throughout all times society has had the small money lender who has thrived on the misfortunes of the farming, trading, and laboring classes. Such power may become very oppressive, if abused. Of greater concern here is the power of the larger financier, the controller of other people's funds needed in industry.

A business enterprise first calls upon the financier when the enterprise is being organized. The executive in charge of financial affairs may undertake to raise the funds himself, appealing directly to investors, who in this case become the financiers of the enterprise. How much control over the affairs of the enterprise will be assumed by these financiers depends on the terms on which they agree to come in. Ordinarily they are willing to allow the executives, who are organizing the enterprise, to run it. Instead of attempting to raise the funds in this manner, the executives may decide to have the financing done by a specialist — in this case an investment banker. This is especially likely to occur if the enterprise is a large one, involving the raising of hundreds of thousands, or millions, of dollars. The investment banker will undertake to sell shares of stock, or bonds, or both, to

the public (see pages 264–266). As the price for his services he will probably receive a block of common stock and a position on the board of directors. This reward may place considerable power in the hands of the banker, especially the power to influence the policies of the new corporation. Whether this means good or ill for the public depends on conditions. If the amount of stock taken by the banker is only a fair reward for his services, the public has little cause for complaint, while the corporation saves its much-needed cash. If the banker's position on the board of directors results in more efficient management, better products, lower prices to consumers, higher wages and steadier employment for workers, well and good. If it results in secret favors to the banker, or to concerns in which the banker is heavily interested, or in other practices violating good business ethics, it is bad.

After an enterprise is launched, its day-to-day business brings it in close contact with financiers. Its minor financial operations, such as collecting and depositing its cash, and paying its bills, are largely routine work both for it and for the financial institutions involved. But there are major financial operations, especially the arranging of loans at banks and occasional financial reorganizations involving the issue and sale of new securities, that give financiers an opportunity to exert their power. The arranging of loans brings the enterprise before the commercial banker; the issue of new securities before the investment banker.

Commercial bankers pursue various policies in discussing loans with business enterprises. One banker will adopt the policy of refusing loans if the applicant's affairs are not in proper condition, and under no circumstances will the banker even suggest to the applicant how he ought to run his business. Another banker will adopt the policy of advising his

customers, but will not insist on having his own way. The customers heeding his advice are much more likely to get loans than those who turn a deaf ear. Still another type of banker will do more than advise; he will ask, perhaps insist, that certain changes be made in the conduct of the borrower's business, before a loan will be granted.

Whereas the commercial banker exercises his power mostly in an informal way, the investment banker tends to exercise his in a formal way. That is, commercial bankers are almost continuously in consultation with business men, because business men are borrowing almost continuously at the commercial banks. Personal conferences and financial statements from business firms enable the commercial banker to keep in close touch with his borrower's affairs. He does not need representation on the board of directors to know what is going on. On the contrary, the investment banker typically deals only intermittently with a particular business concern. He may float a bond issue this year for a business enterprise, recommend the bonds to the investing public, and not handle another issue of the same enterprise for years. It may seem desirable for him to keep in close touch with the enterprise, in order to help safeguard the bonds which he has recommended. He may insist, therefore, that he be given some formal connection with the enterprise, perhaps a position on the board of directors.

Is there a money trust? — The charge has been made from time to time that the country is in the grip of a money trust; that powerful financial institutions are interwoven with one another and with big business in such a way as to control the financial, and to a considerable degree the business, life of the nation.

In 1912 Congress appointed a committee to investigate the "Concentration of Control of Money and Credit." Much

testimony was heard and evidence taken. The report submitted to Congress stated that:

Eighteen selected financial institutions [the report names the eighteen] were affiliated through a system of interlocking directorates with banks, trust companies, transportation systems, public utility companies, and trading corporations. In the aggregate they held:

385 directorships in 41 banks and trust companies
50 directorships in 11 insurance companies
155 directorships in 31 railroad systems
6 directorships in 2 express companies
4 directorships in 1 steamship company
98 directorships in 28 producing and trading corporations
48 directorships in 19 public utility companies

In all 746 directorships in 133 corporations having total resources or capitalization of $25,325,000,000.

A smaller group of the more powerful institutions, known as the inner or primary group, to wit, J. P. Morgan and Co., the First National Bank, the National City Bank, the Guaranty Trust Co., and the Bankers Trust Co., together have:

118 directorships in 34 banks and trust companies
30 directorships in 10 insurance companies
105 directorships in 32 transportation systems
63 directorships in 24 producing and trading corporations
25 directorships in 12 public utility corporations

In all 341 directorships in 112 corporations having aggregate resources or capitalization of $22,245,000,000.

It is impossible that there should be competition with all the facilities for raising money or selling large issues of bonds in the hands of these few bankers and their partners and allies, who together dominate the financial policies of most of the existing systems.

The possibility of competition between these banking houses in the purchase of securities is further removed by the understanding between them and others that one will not seek, by offering better terms, to take away from another a customer which it has hitherto served.

If by a money trust is meant an established and well-defined identity and community of interest between a few leaders of finance which has been created and is held together through stock holdings, interlocking direc-

torates, and other forms of domination over banks, trust companies, railroads, public service and industrial corporations, and which has resulted in a vast and growing concentration of control of money and credit in the hands of a comparatively few men, your committee has no hesitation in asserting as the result of its investigation that this condition, largely developed within the past five years, exists in this country to-day.

It may be that this recently concentrated money power so far has not been abused otherwise than in the possible exaction of excessive profits through absence of competition. Whilst no evidence of abuse has come to the attention of the committee from impartial sources, neither has there been adequate proof or opportunity for proof on the subject.

Your committee is convinced that however well founded may be the assurances of good intentions by those holding the places of power which have been thus created, the situation is fraught with too great peril to our institutions to be tolerated.[1]

What a senator found. — Eight years after the above report was made, the late Senator La Follette spoke on the "Money Trust," illustrating his remarks with the chart shown on page 477.[2]

This chart, together with the one on page 471, seems to indicate that there has been no let-up in the tendency toward community of interest among the financial institutions as well as between the financial institutions and the great industries of the country.

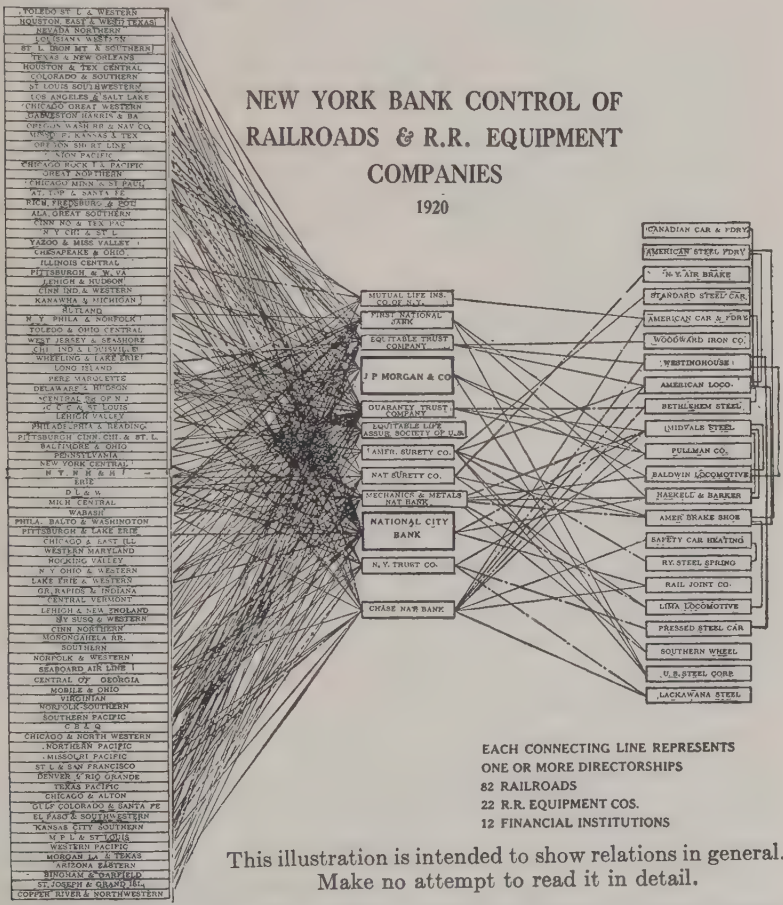
Morgan's defense. — When the Congressional Committee was making its investigation in 1912, J. P. Morgan and Co. were invited to make a defense of the conditions found. The following extracts from the statement of Morgan and Co. gives the gist of their defense:

Just as grain and cotton and manufactures are commodities subject to the unchanging laws of supply and demand, so, in the same way, money and credits are commodities subject to the same unvarying laws, but far

[1] Report of Committee Appointed to Investigate the Concentration of Control of Money and Credit, sixty-second Congress, third Session, pp. 89, 130, 133, 161.

[2] See reference, page 471.

more intensely; for while bulky merchandise is not always immediately transferable upon demand, money and credits are so liquid as to be transferable by telegraph all over the world. . . .



This illustration is intended to show relations in general. Make no attempt to read it in detail.

In the preamble to the House Resolution under which your Committee acts we find this statement: "Whereas it has been further charged and is *generally believed* [the italics are our own] that these same groups of financiers are enabled to regulate the interest rates for money, to create, avert, and

compose panics, etc." The factors which determine interest rates are not local in their source, but are world-wide, being determined and — owing to the freedom of international exchange — being regulated by the average demand for credit throughout the world's money markets. If any man or group of men had the ability and resources — which they have not — to withhold credits in any one market, like New York, the situation would ordinarily be promptly relieved by the automatic inflow of credits from some altogether different source.

. . . There have been spread before your Committee elaborate tables of so-called interlocking directorates from which exceedingly mistaken inferences have been publicly drawn. In these tables it is shown that 180 bankers and bank directors serve upon the boards of corporations having resources aggregating twenty-five billion dollars, and it is implied that this vast aggregate of the country's wealth is at the disposal of these 180 men. But such an implication rests solely upon the untenable theory that these men, living in different parts of the country, in many cases personally unacquainted with each other, and in most cases associated only in occasional transactions, vote always for the same policies and control with united purpose the directorates of the 132 corporations on which they serve. The testimony failed to establish any concerted policy or harmony of action binding these 180 men together, and as a matter of fact no such policy exists. The absurdity of the assumption of such control becomes more apparent when one considers that on the average these directors represent only one quarter of the memberships of their boards. It is preposterous to suppose that every "interlocking" director has full control in every organization with which he is connected, and that the majority of directors who are not "interlocking" are mere figureheads, subject to the will of a small minority of their boards.

Perhaps the greatest harm in the presentation referred to lay in the further unwarranted inference, to which has been given wide publicity, that the vast sum of $25,000,000,000 was in cash or liquid form, subject to the selfish use or abuse of individuals. Such an idea excites the public mind to demand the correction of a fancied situation which does not exist.

The steady growth in the size of banks in New York and Chicago and the frequent merger of two or more banks into one institution have erroneously been designated before your Committee as "concentration." This steady growth and these mergers, however, are a development due simply to the demand for larger banking facilities to care for the growth of the country's business. As our cities double and treble in size and importance, as

railroads extend and industrial plants expand, not only is it natural, but it is necessary, that our banking institutions should grow in order to care for the increased demands put upon them. . . .

Many questions were asked before your Committee as to the wisdom of having representatives of private banking houses sit upon the boards of corporations whose securities the same bankers frequently offer for sale. This practice, which has been in vogue ever since the creation of limited companies, has arisen, not from a desire on the part of the banker to manage the daily affairs of the corporation or to purchase its securities more cheaply than he otherwise could, but rather because of his moral responsibility as sponsor of the corporation's securities, to keep an eye upon its policies and to protect the interests of investors in the securities of that corporation.

What are we to believe? — Amid these various arguments and counter-arguments, one is left somewhat confused. Is there a money trust? If there is, should it be regarded by the public as a blessing or a curse? To the author it seems that we can lay down several principles:

1. *Concentration is an economic force.* — Larger and larger industries and financial institutions are an inevitable growth. They are the most profitable way to carry on certain businesses. Concentration does not mean that *every* business must become large or perish; it does mean, however, that where conditions are ripe for concentration — where more profits can be made by concentration into larger and fewer concerns — such concentration is certain to come.

2. *If concentration results in making industry more productive and economical, it is a desirable movement.* — Much of the concentration into large establishments has done this very thing. Large-scale methods of making steel are cheaper and better, as a rule, than small-scale methods. Handling life insurance on a large scale is safer than on a small scale, because among a large number of persons the actual deaths will run much closer to the estimated deaths than they will among a small group. It may well be that concentration in

the financial field, by mobilizing and transferring to industry large sums at one time, makes for cheaper and better goods for the public. If so, concentration of financial resources is an economic advantage.

3. *Society must control concentrated power.* — A live wire carrying 220,000 volts means death if uncontrolled, but a useful servant if controlled. Similarly, concentration in the industrial and financial world carries a serious menace to public welfare if uncontrolled, while if it is controlled it becomes a useful servant. Especially when concentration results in monopoly, must social control be exercised. If all the railroads connecting New York and Chicago were concentrated into one vast monopoly, the service and rates would be intolerable, unless the government provided carefully for the public welfare. If all automobiles were made by one company, it is almost a certainty that we would not have seen the steady improvement and lowered prices of the past twenty years. If there is only one investment banking house capable of taking care of a $50,000,000 bond issue, that one house will be able to exact an unreasonable profit for its service. Even if there are several large investment houses, and they will not submit competitive bids for a bond issue, the result is monopoly and the public will suffer. Hence concentration should not proceed to the point of monopoly, unless the government is prepared to protect the people. The most effective methods of control found by society are: *competition*, because it tends to prevent the charging of unreasonably high prices and the rendering of poor service; *publicity*, because most business men and financiers are sensitive to public criticism and tend to correct evils when evils are exposed; and *legislation*, by which certain practices regarded as desirable may be encouraged, while other practices regarded as undesirable may be prohibited. Society

must keep the upper hand on concentrated power in both the industrial and the financial fields.

Our growing foreign investments emphasize our financial power. — In recent years another development has taken place which is carrying our financial power into new fields. We are investing large sums in foreign countries, especially in Central and South America.

These growing investments abroad give rise to some new problems. Interest payments must flow to the United States chiefly in the form of goods, since foreign debtors are not in a position to ship large sums of gold each year to the United States. If increasing amounts of foreign goods flow into the United States, will the effects be advantageous or disadvantageous to American consumers and to American industries? Suppose a foreign city which has sold its bonds to American investors fails to pay interest or principal when due. What could our investors do about it? Or suppose the government of a weak, Central American state defaults on its promises to pay. Should American gunboats be used to help private American citizens collect their money, or should we take the position that Americans investing abroad do so at their own risk? Do our investments, especially in countries lying between the United States and the Panama Canal, tend to give our government an excuse to raise our flag in those regions, thereby violating the independence of those countries? Should our investment bankers be given a free hand to make whatever terms they can with weaker borrowers abroad or should the terms of foreign loans be subjected to governmental control? These are but a few of the many perplexing problems being introduced into our life by our growing foreign investments. Finance seems to create more new problems than it solves. It is leading us we know not whither. Can society keep the upper hand over this force, directing its

powers for human good? Shall money be the servant or the master of man?

QUESTIONS

1. "It has been thought that business existed for profit. That is wrong. Business exists for service." Discuss.

2. "We do what pays best." To what extent is this true of the mother in the home? Of the student in school? Of the members of an athletic team? Of business men?

3. "Every man has his price." What is meant by this statement? Do you believe it? Give your reasons.

4. "There must be some way to distribute labor and capital among the various industries. No better way can be devised than profits." What other ways are there? What way was used under feudalism in the Middle Ages? If we were to change, what way do you think we would adopt?

5. The argument is frequently made that it is a good thing to have wealthy persons squander their money, for it puts money into circulation and "gives the rest of us a chance at it."

(*a*) What effect has wasting and squandering money on drawing labor and capital into certain fields and away from other fields? Is there any gain to society in this?

(*b*) If the money were not wasted but were given to charitable or educational institutions would it have gone into circulation and given others a chance at it? What difference would it have made so far as directing labor and capital into certain fields is concerned?

(*c*) If the money were neither wasted nor given away, but left on deposit in the bank, and were loaned out by the bank to a radio manufacturer, would it have gone into circulation and given others a chance at it? What would have determined whether the radio industry would get these funds or some other industry?

(*d*) Do you now think the argument of wealthy persons squandering their money is a sound argument?

6. Why is the making of motion pictures typically a large-scale industry while the making of photographs is typically a small-scale industry? Why do the motion picture producers depend upon funds raised from the investing public to a much greater extent than photographers do?

7. "The more an industry can use machinery, the larger that industry tends to become." Why is this true? Is there a tendency for banks to

use machinery? May this be one reason why banks tend to become larger? Suggest other reasons.

8. "One of the principal forces stopping the growth of large-scale business is the impossibility of one man keeping his hand on the affairs of an expanding business. It gets too big for one executive to administer." Why should not expansion go on in spite of this?

9. "The big bank has been produced by the same forces that produced the big manufacturing plant." Explain. Is it possible that the big manufacturing plant helped to produce the big bank and *vice versa?* Why?

10. "As commerce and industry become world wide, finance must do likewise." Can you cite any evidence that finance has become world wide?

11. "The larger the industry, the fewer men control, both in the election of officers and in the internal management." Why is this true?

12. "During the World War, President Wilson was the most powerful man in the world. Ours was the most powerful nation, and our industries, already highly concentrated, were put at the service of the government, which meant at the service of the President. His decisions were most momentous because they affected millions of people on both sides of the Atlantic." Could this concentration of power have been avoided? Is the President to-day, even in peace time, more powerful than the President of fifty years ago? Why?

13. Do you think it possible for a group of New York bankers to fix arbitrarily the rate of interest? Why or why not?

14. In what sense does the banker hold the veto power over the plans of the business man? Does it make any difference whether there is one, or more than one, banker in the town? May it be the investment banker rather than the commercial banker who wields the chief veto power? Explain.

15. Do you think the investment banker takes a directorship on a railroad because he wants to protect his customers who have purchased the railroad's bonds, or because he sees a chance to get more business from the railroad, or from some other motive? Give reasons for your answer.

16. "The development of the water power resources of America is going to place the control of those resources in the hands of the bankers." Assuming that this happens, show the process by which it will come about. Do you see any objections to placing the control in the hands of the bankers?

17. "We have a single-track money system. It is a mighty fine system for those who own it. It is a perfect system for the interest-collecting, credit-controlling financiers who literally own the commodity called money and who literally own the machinery by which money is made and used." —

From *My Life and Work*, by Henry Ford, page 276. Discuss these statements.

18. Why have our investments in foreign countries grown so rapidly since the World War? What benefits and what dangers may come from these investments to the inhabitants of the countries into which the new capital is flowing?

19. Do you consider the growth of financial power a menace or a blessing to our country? Would you leave it alone or attempt to regulate it? Why?

TOPICS FOR FURTHER STUDY

1. Money Economy and Social Welfare:
   Foster and Catchings, *Profits*, Part IV.
   Marshall, *Industrial Society*, pp. 304–320; 368–372.
   Moulton, *Money and Banking*, Part I, pp. 31–44.

2. Concentration and Growth of Power in the Financial Field:
   Moulton, *Financial Organization*, chaps. XXIX, XXX.
   Moulton, *Money and Banking*, Part II, pp. 471–495.
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